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Natural Resources Conservation Service

Montana Basin Outlook Report April 1, 2002

Basin Outlook Reports
and
Federal - State - Private
Cooperative Snow Surveys

For more water supply and resource management information, contact:
See Attached List

How forecasts are made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Natural Resources Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

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Basin Outlook Reports
and
Federal - State - Private
Cooperative Snow Surveys

United States Department of Agriculture
Natural Resources Conservation Service
Bozeman, Montana

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Where to Get More Information

This contact list provides you with the names and phone numbers of individuals who can provide more detailed snow survey information for each county.

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1/9/02

SNOW COURSE AND SNOTEL SUMMARY

APRIL 2002

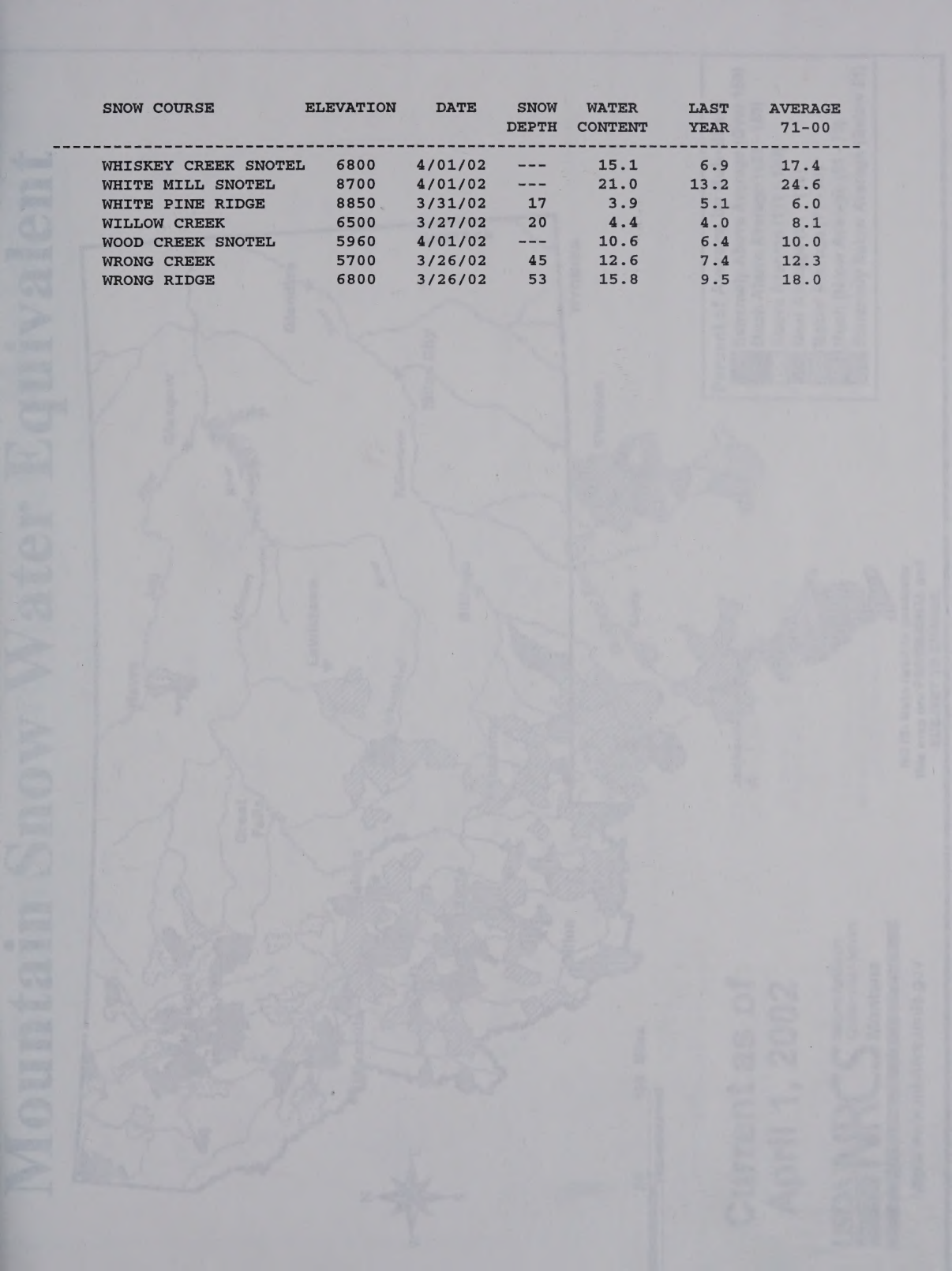
SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
ABE LINCOLN	4440	3/27/02	60	21.5	9.0	18.9
ABUNDANCE LAKE	8800	3/31/02	60	20.6	12.1	20.6
ALBRO LAKE SNOTEL	8300	4/01/02	---	14.2	11.0	--
AMBROSE	6480	3/27/02	38	10.5	7.5	12.4
ARCH FALLS	7350	3/27/02	34	9.4	6.8	11.9
ASHLEY DIVIDE	4820	3/26/02	29	8.0	3.5	6.0
ASHLEY LAKE	4000	3/26/02	24	6.1	4.0	5.5
BADGER PASS SNOTEL	6900	4/01/02	---	40.6	18.9	35.3
BALD RIDGE	7500	3/27/02	33	8.1	10.0	12.4
BANFIELD MTN SNOTEL	5600	4/01/02	---	22.1	11.0	19.8
BAREE CREEK	5500	3/28/02	120	40.1	23.7	43.1
BAREE MIDWAY	4600	3/28/02	94	31.8	18.5	33.0
BAREE TRAIL	3800	3/28/02	49	16.3	7.8	7.7
BARKER LAKES SNOTEL	8250	4/01/02	---	10.7	11.6	14.6
BASIN CREEK SNOTEL	7180	4/01/02	---	5.0	6.8	8.7
BASSOO PEAK	5150	3/29/02	41	12.4	8.4	9.7
BEAGLE SPGS SNOTEL	8850	4/01/02	---	6.5	7.4	9.3
BEAR BASIN	8150	3/27/02	49	17.0	12.0	20.4
BEAVER CREEK SNOTEL	7850	4/01/02	---	16.6	11.7	18.2
BERRY MEADOW	7000	3/27/02	23	4.6	5.1	7.4
BIG CREEK	6750	3/26/02	108	40.0	32.0	43.7
BIG SNOWY	7150	3/27/02	51	14.8	14.2	20.2
BISSON CREEK SNOTEL	4920	4/01/02	---	9.7	8.3	9.9
BLACK BEAR SNOTEL	7950	4/01/02	---	38.6	23.0	39.8
BLACK MOUNTAIN	7750	3/27/02	34	9.2	11.3	14.6
BLACK PINE SNOTEL	7100	4/01/02	---	9.1	8.3	12.5
BLACKTAIL	5650	3/30/02	49	16.0	8.9	14.2
BLOODY DICK SNOTEL	7550	4/01/02	---	9.2	6.8	12.6
BLUE LAKE	5900	4/02/02	74	25.6	13.7	23.7
BOTS SOTS	7750	3/29/02	26	5.9	4.1	7.8
BOULDER MTN SNOTEL	7950	4/01/02	---	19.0	12.8	20.4
BOX CANYON SNOTEL	6700	4/01/02	---	8.5	6.2	10.4
BOXELDER CREEK	5100	3/28/02	27	6.0	4.5	7.6
BRACKETT CR SNOTEL	7320	4/01/02	---	19.3	14.4	21.5
BRANHAM LAKES	8850	3/27/02	66	23.4	18.4	28.9
BRUSH CREEK TIMBER	5000	3/28/02	33	8.9	5.0	8.1
BULL MOUNTAIN	6600	3/28/02	19	4.5	3.3	5.9
BURNT MTN SNOTEL	5880	4/01/02	---	4.7	--	--
CABIN CREEK	5200	3/28/02	29	6.0	5.5	5.4
CALL ROAD	8050	3/31/02	27	6.6	10.0	11.9
CALVERT CR SNOTEL	6430	3/29/02	27	6.5	5.3	8.1
CAMP MISERY	6400	3/28/02	131	51.6	27.8	49.3
CAMP SENIA	7890	3/29/02	20	4.0	3.2	6.2
CARROT BASIN SNOTEL	9000	4/01/02	---	24.6	17.0	28.1
CARTER CREEK	7400	4/01/02	14	3.7	3.8	6.3
CEDAR GROVE	3760	3/28/02	52	14.2	8.6	11.4
CHESSMAN RESERVOIR	6200	3/25/02	12	2.4	3.2	3.5
CHICKEN CREEK	4060	3/28/02	50	16.9	10.0	15.2
CLOVER MDW SNOTEL	8800	4/01/02	---	14.1	13.1	18.0
COLE CREEK SNOTEL	7850	4/01/02	---	7.4	9.0	16.4

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
COLLEY CREEK	6300	3/29/02	26	6.8	6.1	7.9
COMBINATION SNOTEL	5600	4/01/02	---	4.5	4.0	4.9
COPPER BOTTOM SNOTEL	5200	4/01/02	---	14.3	8.0	11.0
COPPER CAMP SNOTEL	6950	4/01/02	---	42.1	16.3	32.4
COPPER CREEK	5700	3/27/02	55	16.2	7.6	13.3
COPPER MOUNTAIN	7700	3/30/02	31	8.0	9.4	11.2
COTTONWOOD CREEK	6400	3/27/02	23	5.2	4.7	8.3
COYOTE HILL	4200	3/28/02	35	10.2	6.0	8.7
CREVICE MOUNTAIN	8400	3/26/02	39	10.4	4.1	10.8
CRYSTAL LAKE SNOTEL	6050	4/01/02	---	11.5	11.7	12.3
DAD CREEK LAKE	8400	3/31/02	31	9.0	11.3	14.9
DAISY PEAK SNOTEL	7600	4/01/02	---	9.9	6.1	11.0
DALY CREEK SNOTEL	5780	4/01/02	---	8.9	6.8	11.1
DARKHORSE LK. SNOTEL	8700	4/01/02	---	24.4	17.9	32.5
DAVIS CREEK	5400	3/26/02	72	26.7	11.4	24.2
DEADMAN CR SNOTEL	6450	4/01/02	---	9.0	7.3	10.0
DESERT MOUNTAIN	5600	3/30/02	48	15.3	9.8	14.7
DISCOVERY BASIN	7050	3/25/02	28	6.7	8.6	10.4
DIVIDE SNOTEL	7800	4/01/02	---	7.8	10.1	11.3
DIX HILL	6400	3/31/02	33	10.3	7.9	10.3
DUPUYER CREEK SNOTEL	5750	4/01/02	---	8.6	7.5	9.9
EAGLE CREEK	7000	3/27/02	36	9.3	7.5	13.8
EAST FORK R.S.	5400	4/01/02	16	3.8	3.3	4.7
EL DORADO MINE	7800	3/24/02	51	14.0	14.4	20.2
ELK HORN SPRINGS	7800	3/31/02	28	7.0	10.7	9.1
ELK PEAK	8000	3/26/02	42	12.0	9.3	16.1
EMERY CREEK SNOTEL	4350	4/01/02	---	15.2	10.3	15.3
FATTY CREEK	5500	3/26/02	72	23.6	19.0	24.3
FISH CREEK	8000	3/25/02	27	6.1	8.1	9.9
FISHER CREEK SNOTEL	9100	4/01/02	---	32.6	18.8	35.4
FIVE-BULL	5700	3/28/02	30	6.8	3.4	5.5
FLATTOP MTN SNOTEL	6300	4/01/02	---	51.1	24.0	45.1
FLEECER RIDGE	7500	3/28/02	34	9.5	5.5	10.9
FOOLHEN	8280	3/31/02	49	14.8	10.9	16.2
FOREST LAKE	6400	3/27/02	32	8.0	6.0	11.7
FOUR MILE	6900	3/25/02	23	5.6	3.8	8.4
FOURTH OF JULY	3450	3/27/02	30	9.6	4.2	7.4
FRED BURR PASS	8000	3/26/02	65	21.0	15.7	23.9
FREIGHT CREEK	6000	4/02/02	54	15.5	8.2	14.8
FROHNER MDWS SNOTEL	6480	4/01/02	---	6.3	7.1	8.0
GARVER CREEK SNOTEL	4250	4/01/02	---	10.6	5.6	9.9
GIBBONS PASS	7100	4/01/02	57	19.6	12.2	22.7
GOAT MOUNTAIN	7000	3/29/02	45	11.2	6.6	9.7
GOLD CREEK LAKE	7200	3/24/02	40	10.6	9.6	14.7
GOLD STONE	8100	3/28/02	43	11.7	9.8	16.9
GRASSHOPPER	7000	3/26/02	17	3.4	3.6	5.8
GRAVE CRK SNOTEL	4300	4/01/02	52	17.7	8.9	15.6
GRIFFIN CR DIVIDE	5150	3/29/02	34	10.6	7.0	10.3
GUNSIGHT LAKE	6300	4/02/02	122	45.9	24.4	39.3
HAND CREEK SNOTEL	5030	4/01/02	---	11.2	8.3	11.7
HAWKINS LAKE SNOTEL	6450	4/01/02	---	30.8	12.2	27.4
HAYMAKER	8050	3/28/02	42	10.3	8.0	11.8
HEART LAKE TRAIL	4800	3/26/02	77	26.4	11.7	20.6
HEBGEN DAM	6550	3/29/02	32	9.3	5.1	12.0

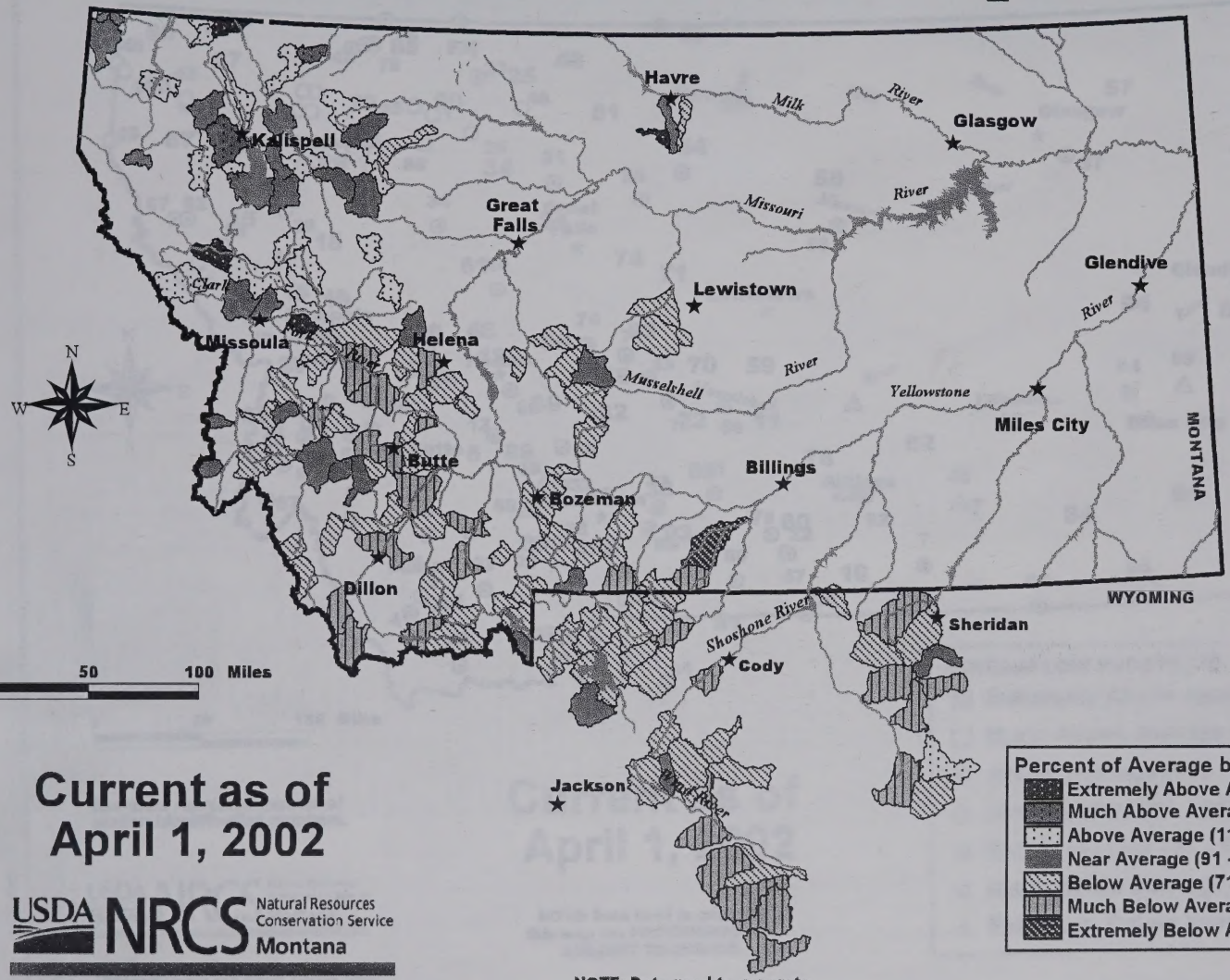
SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
HELL ROARING DIVIDE	5770	3/27/02	83	30.2	14.0	29.5
HERRIG JUNCTION	4850	3/28/02	79	30.1	12.0	26.0
HOLBROOK	4530	3/30/02	38	11.0	6.1	8.2
HOODOO BASIN SNOTEL	6050	5/01/02	---	55.4	21.7	45.3
INDEPENDENCE	7850	3/28/02	55	16.5	8.8	17.4
INTERGAARD	6450	3/26/02	20	4.8	4.8	7.7
JAHNKE LAKE TRAIL	7200	3/31/02	28	7.2	4.6	10.4
JOHNSON PARK	6450	3/27/02	25	6.0	3.2	5.5
KEELER CREEK	3300	3/27/02	58	21.2	9.0	11.5
KINGS HILL	7500	3/28/02	41	10.3	--	13.7
KISHENEHN	3890	3/30/02	34	11.2	4.1	6.8
KRAFT CREEK SNOTEL	4750	4/01/02	---	15.5	11.9	14.1
LAKE CREEK	6100	3/29/02	25	6.0	2.9	8.2
LAKEVIEW CANYON	6930	4/02/02	28	7.6	4.5	11.1
LAKEVIEW RDG. SNOTEL	7400	4/01/02	---	9.6	6.4	11.8
LEMHI RIDGE SNOTEL	8100	4/01/02	---	8.4	8.5	11.2
LICK CREEK SNOTEL	6860	4/01/02	---	9.0	8.7	13.0
LITTLE PARK	7400	3/27/02	43	14.0	10.3	15.9
LOGAN CREEK	4300	3/28/02	28	7.5	5.6	6.7
LONE MOUNTAIN SNOTEL	8880	4/01/02	---	17.0	13.7	18.7
LOST HORSE	5940	3/28/02	78	27.2	13.7	30.7
LOWER TWIN SNOTEL	7900	4/01/02	---	12.8	10.7	19.0
LUBRECHT SNOTEL	4680	4/01/02	---	5.4	1.9	3.6
LUBRECHT FOREST NO 3	5450	3/29/02	22	5.8	4.5	5.7
LUBRECHT FOREST NO 4	4650	3/29/02	9	2.6	1.3	1.3
LUBRECHT FOREST NO 6	4040	4/01/02	11	2.4	1.7	1.6
LUBRECHT HYDROPLOT	4200	3/29/02	19	5.5	1.3	2.9
MADISON PLT SNOTEL	7750	4/01/02	---	21.7	13.1	25.5
MANY GLACIER SNOTEL	4900	4/01/02	---	21.5	10.0	15.3
MARIAS PASS	5250	3/28/02	66	22.3	12.1	16.8
MIDDLE MILL CREEK	7850	3/27/02	36	10.8	9.1	15.6
MILL CREEK	7500	4/03/02	39	12.4	9.6	12.6
MINERAL CREEK	4000	4/01/02	55	19.4	10.2	17.4
MONUMENT PK SNOTEL	8850	4/01/02	---	20.5	13.0	21.0
MOSS PEAK SNOTEL	6780	4/01/02	---	36.1	25.4	38.2
MOULTON RESERVOIR	6850	3/25/02	21	4.6	5.0	6.9
MT LOCKHART SNOTEL	6400	4/01/02	---	24.4	13.0	21.1
MUDD LAKE	7650	3/29/02	56	16.8	11.6	19.7
MULE CREEK SNOTEL	8300	4/01/02	---	12.7	11.9	15.8
N.E. ENTRANCE SNOTEL	7350	4/01/02	---	7.7	4.4	11.3
NEVADA RIDGE SNOTEL	7020	4/01/02	---	13.6	11.4	15.5
NEW WORLD	6900	3/27/02	35	10.8	10.4	14.6
NEWTON MOUNTAIN	5600	3/25/02	95	36.3	14.4	33.9
NEZ PERCE CMP SNOTEL	5650	4/01/02	---	15.1	9.5	14.7
NEZ PERCE CREEK	6600	3/30/02	17	4.8	4.4	6.5
NEZ PERCE PASS	6570	3/28/02	46	14.6	9.5	17.8
N.F. ELK CR SNOTEL	6250	4/01/02	---	11.0	9.6	12.4
NF JOCKO SNOTEL	6330	4/01/02	---	53.2	29.5	45.3
NOISY BASIN SNOTEL	6040	4/01/02	---	40.5	24.5	40.9
NOTCH	8500	3/31/02	42	12.4	15.0	16.7
OPHIR PARK	7150	3/31/02	40	12.3	11.5	16.7
PALISADE CREEK	8250	3/28/02	85	30.4	19.7	29.8
PETERSON MDW SNOTEL	7200	4/01/02	---	6.3	8.7	10.5
PICKET PIN LOWER	6200	3/28/02	17	3.3	4.1	2.6

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
PICKET PIN MIDDLE	7250	3/28/02	25	5.0	6.7	10.9
PICKET PIN UPPER	8100	3/28/02	47	11.7	11.2	19.3
PICKFOOT CRK SNOTEL	6650	4/01/02	---	8.9	7.6	11.7
PIKE CREEK SNOTEL	5930	4/01/02	---	30.6	13.3	27.5
PIPESTONE PASS	7200	3/29/02	15	2.9	4.2	5.7
PLACER BASIN SNOTEL	8830	4/01/02	---	14.5	11.3	17.8
POORMAN CR SNOTEL	5100	4/01/02	---	50.7	20.2	32.7
PORCUPINE SNOTEL	6500	4/01/02	---	5.7	5.9	6.9
POTOMAGETON PARK	7150	3/31/02	37	11.3	6.3	13.8
RED MOUNTAIN	6000	3/29/02	63	21.4	8.8	18.8
RED TOP	5260	3/25/02	79	28.6	12.4	28.4
REVAIS CREEK	4800	3/27/02	18	4.8	1.0	1.8
ROCK CREEK	5600	3/27/02	30	8.5	8.6	9.8
ROCK CREEK MEADOW	8160	3/29/02	54	16.0	13.9	20.7
ROCKER PEAK SNOTEL	8000	4/01/02	---	10.3	11.9	14.3
ROCKY BOY SNOTEL	4700	4/01/02	---	5.1	3.9	4.4
SACAJAWEA	6550	3/26/02	35	12.3	9.0	13.8
SACAJAWEA SNOTEL	6550	4/01/02	---	12.5	10.4	14.8
SADDLE MTN SNOTEL	7900	4/01/02	---	23.0	15.0	25.8
S.F. SHIELDS SNOTEL	8100	4/01/02	---	13.7	12.6	17.7
SHORT CREEK SNOTEL	7000	4/01/02	---	3.9	4.3	6.1
SHOWER FALLS SNOTEL	8100	4/01/02	---	18.1	16.3	22.7
SKALKAHO SNOTEL	7260	4/01/02	---	23.7	13.4	24.3
SLAG-A-MELT LAKE	8750	3/31/02	60	21.4	12.1	24.9
SLEEPING WOMAN SNTL	6150	4/01/02	---	18.5	10.3	17.2
SLIDE ROCK MOUNTAIN	7100	3/23/02	45	12.0	7.4	15.5
SMUGGLER MINE	6960	3/27/02	26	6.8	8.1	9.7
SPOTTED BEAR MTN.	7000	4/02/02	45	14.1	11.6	14.1
SPUR PARK SNOTEL	8100	4/01/02	---	19.1	13.7	21.5
STAHL PEAK SNOTEL	6030	4/01/02	---	41.5	17.2	35.3
STEMPLE PASS	6600	3/27/02	38	9.4	6.0	10.2
STORM LAKE	7780	3/25/02	39	9.7	10.2	13.3
STRYKER BASIN	6180	3/28/02	100	36.8	15.1	31.9
STUART MOUNTAIN SNTL	7400	4/01/02	---	35.0	22.6	34.2
SUCKER CREEK	3960	3/28/02	4	1.4	.0	.4
TAYLOR ROAD	4080	3/28/02	16	3.2	.0	1.7
TEN MILE LOWER	6600	3/25/02	23	4.9	5.4	7.0
TEN MILE MIDDLE	6800	3/25/02	30	7.2	7.8	11.4
TEPEE CREEK SNOTEL	8000	4/01/02	---	12.3	9.5	13.5
TIMBERLINE CREEK	8850	4/01/02	---	9.9E	7.7	14.2
TIZER BASIN SNOTEL	6840	4/01/02	---	9.2	9.1	10.3
TRAIL CREEK	7090	3/28/02	32	7.1	7.2	8.5
TRINKUS LAKE	6100	4/02/02	109	44.7	28.3	42.0
TRUMAN CREEK	4060	3/26/02	23	5.9	3.4	3.7
TV MOUNTAIN	6800	3/26/02	58	18.6	13.0	18.5
TWELVEMILE SNOTEL	5600	4/01/02	---	19.6	9.0	17.5
TWENTY-ONE MILE	7150	3/28/02	48	15.0	7.8	16.9
TWIN CREEKS	3580	4/02/02	34	11.6	8.0	9.6
TWIN LAKES SNOTEL	6400	4/01/02	---	46.2	23.6	39.7
UPPER HOLLAND LAKE	6200	4/02/02	101	38.7	21.4	34.6
WALDRON SNOTEL	5600	4/01/02	---	12.7	7.8	10.8
WARM SPRINGS SNOTEL	7800	4/01/02	---	18.5	15.2	21.2
WEASEL DIVIDE	5450	4/01/02	101	40.0	12.3	32.9
WEST YELL'ST SNOTEL	6700	4/01/02	---	10.3	5.3	12.8

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
WHISKEY CREEK SNOTEL	6800	4/01/02	---	15.1	6.9	17.4
WHITE MILL SNOTEL	8700	4/01/02	---	21.0	13.2	24.6
WHITE PINE RIDGE	8850	3/31/02	17	3.9	5.1	6.0
WILLOW CREEK	6500	3/27/02	20	4.4	4.0	8.1
WOOD CREEK SNOTEL	5960	4/01/02	---	10.6	6.4	10.0
WRONG CREEK	5700	3/26/02	45	12.6	7.4	12.3
WRONG RIDGE	6800	3/26/02	53	15.8	9.5	18.0



Mountain Snow Water Equivalent



Current as of April 1, 2002

Percent of Average by Sub-Basin
- Extremely Above Average (Over 150)
- Much Above Average (131 - 150)
- Above Average (111 - 130)
- Near Average (91 - 110)
- Below Average (71 - 90)
- Much Below Average (51 - 70)
- Extremely Below Average (Below 51)

USDA NRCS Natural Resources Conservation Service Montana

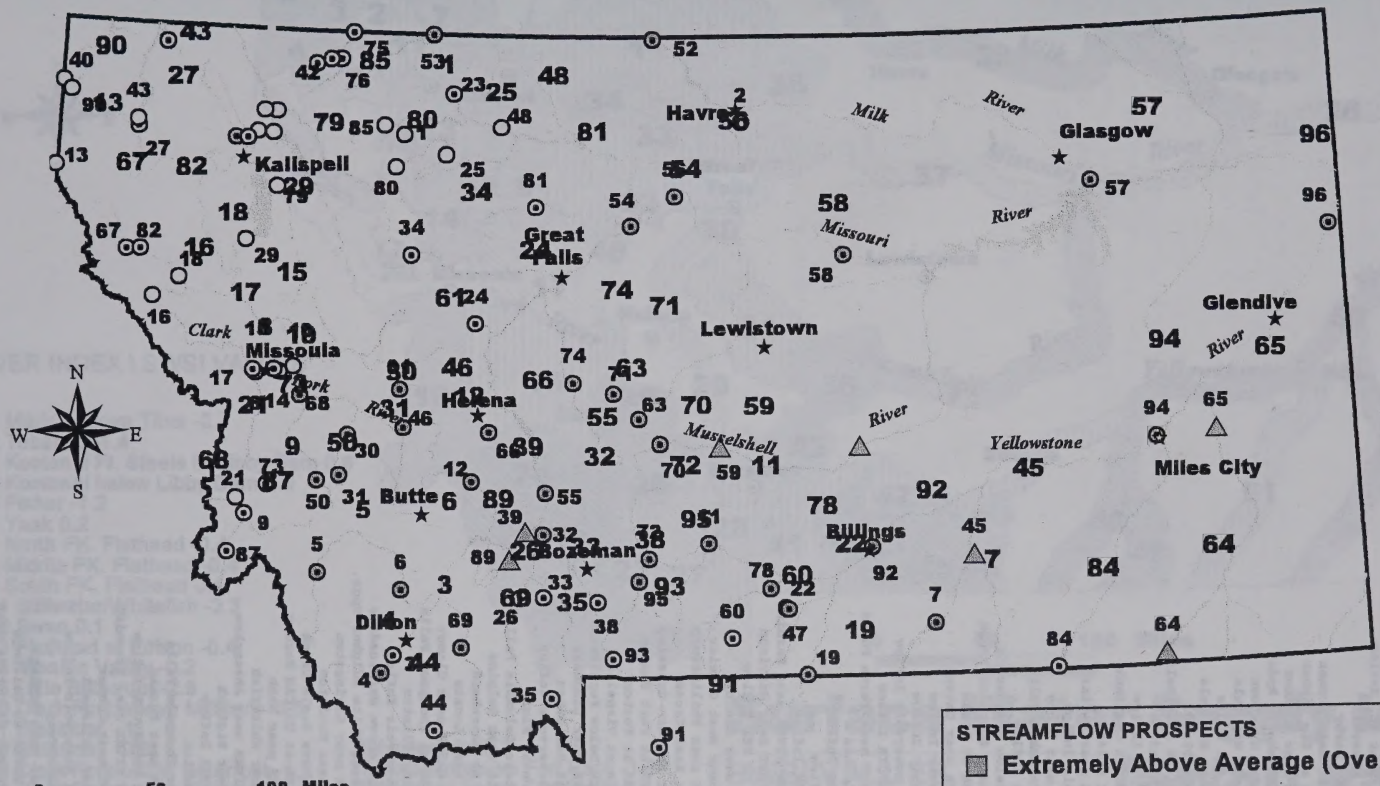
http://www.mt.nrcs.usda.gov

NOTE: Data used to generate this map are PROVISIONAL and SUBJECT TO CHANGE.

Mountain Snow Water Equivalent

UNITED STATES DEPARTMENT OF AGRICULTURE

Streamflow Prospects for Montana



STREAMFLOW PROSPECTS

- Extremely Above Average (Over150)
- Much Above Average (131 - 150)
- Above Average (111 - 130)
- Near Average (91 - 110)
- Below Average (71 - 90)
- Much Below Average (51 - 70)
- Extremely Below Average (Below 51)

Numbers represent individual station identification numbers.

Current as of April 1, 2002

NOTE: Data used to generate this map are PROVISIONAL and SUBJECT TO CHANGE.

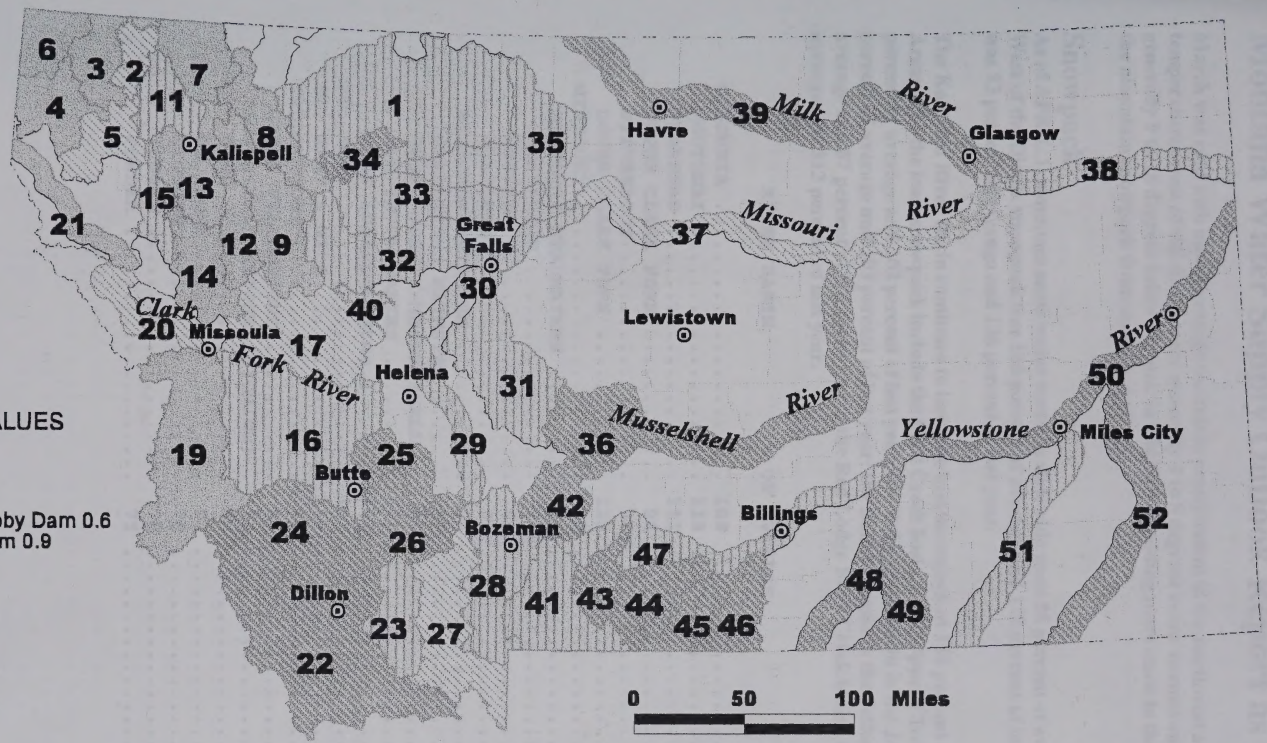
USDA NRCS Natural Resources Conservation Service Montana

http://www.mt.nrcs.usda.gov

Map #	Forecast Point
1	BADGER CREEK near Browning
2	BEAVER CREEK near Havre
3	BEAVERHEAD RIVER at Barretts
4	CLARK CANYON RES Inflow
5	BIG HOLE RIVER at Wisdom
6	BIG HOLE RIVER near Melrose
7	BIGHORN RIVER near St. Xavier
8	BITTERROOT at Missoula
9	BITTERROOT near Darby
10	BLACKFOOT RIVER near Bonner
11	BOULDER RIVER at Big Timber
12	BOULDER RIVER near Boulder
13	CLARK FK at Whitehorse Rpds
14	CLARK FORK above Milltown
15	CLARK FORK above Missoula
16	CLARK FORK at St. Regis
17	CLARK FORK below Missoula
18	CLARK FORK near Plains
19	CLARKS FORK RIVER near Belfry
21	COMO RESERVOIR Inflow
22	COONEY RESERVOIR Inflow
23	CUT BANK CREEK at Cut Bank
24	DEARBORN near Craig
25	DUPUYER CREEK near Valier
26	ENNIS Reservoir Inflow
27	FISHER RIVER near Libby
28	FLATHEAD at Columbia Falls
29	FLATHEAD Lake Inflow
30	FLINT CREEK below Boulder Ck
31	FLINT CREEK near Southern Cross
32	GALLATIN RIVER at Logan
33	GALLATIN RIVER near Gateway
34	GIBSON Reservoir Inflow
35	HEBGEN Reservoir Inflow
36	HUNGRY HORSE Reservoir Inflow
38	HYALITE RESERVOIR Inflow
39	JEFFERSON RIVER near Three Forks
40	KOOTENAI at Leonia
42	LAKE SHERBURNE Inflow
43	LIBBY RES Inflow
44	LIMA RESERVOIR Inflow
45	LITTLE BIGHORN RIVER near Hardin
46	LITTLE BLACKFOOT near Garrison
47	LOWER WILLOW CK RES Inflow
48	MARIAS RIVER near Shelby
49	MF FLATHEAD near West Glacier
50	MF ROCK CREEK near Philipsburg
52	MILK RIVER at East Cross.
53	MILK RIVER at Western Crossing
54	MISSOURI RIVER at Fort Benton
55	MISSOURI RIVER at Toston
56	MISSOURI RIVER at Virgelle
57	MISSOURI RIVER below Fort Peck
58	MISSOURI RIVER near Landusky
59	MUSSELSHELL at Harlowton
60	MYSTIC LAKE Reservoir Inflow
61	NEVADA CREEK near Finn
62	NF FLATHEAD near Columbia Falls
63	NF MUSSELSHELL near Delpine
64	POWDER RIVER at Moorehead
65	POWDER RIVER near Locate
66	PRICKLY PEAR CREEK near Clancy
67	PROSPECT CREEK at Thompson Falls
68	ROCK CREEK near Clinton
69	RUBY RIVER Reservoir Inflow
70	SF MUSSELSHELL above Martinsdale
71	SHEEP CREEK near White Sulphur Spgs.
72	SHIELDS RIVER near Livingston
73	SKALKAHO CK near Hamilton
74	SMITH RIVER above Eagle Creek
75	ST. MARY RIVER at US/CAN Border
76	ST. MARY RIVER near Babb
77	STILLWATER near Whitefish
78	STILLWATER RIVER near Absarokee
79	SWAN RIVER near Bigfork
80	SWIFT RESERVOIR Inflow
81	TETON near Dutton
82	THOMPSON near Thompson Falls
83	TOBACCO RIVER near Eureka
84	TONGUE RIVER RESERVOIR Inflow
85	TWO MEDICINE RIVER near Browning
87	WF BITTERROOT near Conner
88	WHITEFISH near Kalispell
89	WILLOW CREEK Reservoir Inflow
90	YAAK RIVER near Troy
91	YELLOWSTONE at Lake Outlet
92	YELLOWSTONE RIVER at Billings
93	YELLOWSTONE RIVER at Corwin Spgs
94	YELLOWSTONE RIVER at Miles City
95	YELLOWSTONE RIVER near Livingston
96	YELLOWSTONE RIVER near Sidney

UNITED STATES DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION SERVICE



RIVER INDEX \ SWSI VALUES

1 Marias above Tiber -2.7
2 Tobacco -1.4
3 Kootenai Ft. Steele to Libby Dam 0.6
4 Kootenai below Libby Dam 0.9
5 Fisher -1.2
6 Yaak 0.2
7 North FK. Flathead -0.4
8 Middle FK. Flathead -0.4
9 South FK. Flathead 0.1
11 Stillwater/Whitefish -2.3
12 Swan 0.1
13 Flathead at Polson -0.4
14 Mission Valley -0.2
15 Little Bitterroot -2.9
16 Clark Fork above Milltown -2.8
17 Blackfoot -1
19 Bitterroot -0.8
20 Clark Fork below Bitterroot -1.5
21 Clark Fork below Flathead -0.8
22 Beaverhead -3.3
23 Ruby -2.8
24 Big Hole -3.4
25 Boulder (Jefferson) -3
26 Jefferson -3.3
27 Madison -1.7
28 Gallatin -2.5
29 Missouri above Canyon Ferry -2.6
30 Missouri below Canyon Ferry -2.4
31 Smith -2.8
32 Sun -2.1
33 Teton -2.2
34 Birch/Dupuyer -3
35 Marias -2.6
36 Musselshell -3
37 Missouri above Fort Peck -1.9
38 Missouri below Fort Peck -2.1
39 Milk -3.4
40 Dearborn near Craig -2.4
41 Yellowstone above Livingston -2.6
42 Shields-3
43 Boulder (Yellowstone) -3.6
44 Stillwater-3.5
45 Rock/Red Lodge -3.6
46 Clarks Fork -3.1
47 Yellowstone above Bighorn -2.9
48 Bighorn below Bighorn Lake -3.9
49 Little Bighorn -3.3
50 Yellowstone below Bighorn -3.4
51 Tongue -2.9
52 Powder -3.5

Surface Water Supply Index (SWSI) Values

Current as of April 1, 2002

SWSI VALUES

- Extremely Dry -4.0 to -3.0
- Moderately Dry -2.9 to -2.0
- Slightly Dry -1.9 to -1.0
- Near Average -0.9 to 0.9
- Sightly Wet 1.0 to 1.9
- Moderately Wet 2.0 to 2.9
- Extremely Wet 3.0 to 4.0
- SWSI Not Applicable

NOTE: Data used to generate this map are PROVISIONAL and SUBJECT TO CHANGE.

USDA NRCS Natural Resources Conservation Service Montana

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Montana Water Supply Outlook Report as of April 1, 2002

March was cold with above average mountain precipitation in the northwest and northcentral part of the state. Air temperatures west of the divide were generally 4 to 8 degrees below normal and east of the divide temperatures were generally 9 to 18 degrees below normal. In addition to adding more snow to the mountains the cold temperatures kept the mountain snowpack from an early melt.

Snowpack

As of APRIL 1, mountain snow water contents statewide were 96 percent of average and 158 percent of last year. West of the Divide snowpack was 108 percent of average and 178 percent of last year. East of the Divide snowpack was 83 percent of average and 136 percent of last year.

The Kootenai River Basin continues to have the best snowpack at 118 percent of average and 226 percent of last year. Areas with the least snowpack include the Flint Creek basin in the Upper Clark Fork, where the snowpack was 74 percent of average and 102 percent of last year; the Ruby River basin in the Jefferson, where the snowpack was 71 percent of average and 103 percent of last year; the Boulder basin in the Jefferson, where snowpack was 67 percent of average and 87 percent of last year; and in the Red Lodge Rock Creek basins where the snowpack was 60 percent of average and 112 percent of last year.

RIVER BASIN	% OF AVERAGE	% OF LAST YEAR
COLUMBIA	108	179
KOOTENAI	118	226
FLATHEAD	111	179
UPPER CLARK FORK	91	136
BITTERROOT	98	178
LOWER CLARK FORK	123	209
MISSOURI	85	134
MISSOURI HEADWATERS	80	126
JEFFERSON	77	117
MADISON	84	148
GALLATIN	84	130
MISSOURI MAINSTEM	93	142
HEADWATERS MAINSTEM	82	110
SMITH-JUDITH-MUSSELSHELL	83	124
SUN-TETON-MARIAS	109	177
MILK (Bearpaw Mtns.)	111	187
ST. MARY	118	208
ST. MARY & MILK	117	205
YELLOWSTONE	78	134
UPPER YELLOWSTONE	81	137
LOWER YELLOWSTONE (WYOMING)	76	132
WIND	75	151
SHOSHONE	81	148
BIGHORN	78	129
TONGUE	75	117
POWDER	75	113

Precipitation

March mountain and valley precipitation across the state was 110 percent of average and 164 percent of last year, while the water year precipitation was 95 percent of average and 149 percent of last year. West of the Continental Divide, March mountain and valley precipitation was 130 percent of average and 178 percent of last year and the water year precipitation was 107 percent of average and 181 percent of last year. East of the Divide, March mountain and valley precipitation was 94 percent of average and 150 percent of last year and the water year precipitation was 84 percent of average and 122 percent of last year.

RIVER BASIN	MARCH % OF AVERAGE	WATER YEAR % OF AVERAGE
COLUMBIA	130	107
KOOTENAI	128	118
FLATHEAD	130	110
UPPER CLARK FORK	127	97
BITTERROOT	129	102
LOWER CLARK FORK	149	115
MISSOURI	92	85
JEFFERSON	73	82
MADISON	70	88
GALLATIN	61	84
MISSOURI MAINSTEM	101	73
SMITH-JUDITH-MUSSELSHELL	102	82
SUN-TETON-MARIAS	172	100
MILK	98	76
ST. MARY	139	111
YELLOWSTONE	105	82
UPPER YELLOWSTONE	106	84
LOWER YELLOWSTONE	109	81
WIND	115	75
SHOSHONE	142	88
BIGHORN	79	80
TONGUE	100	93
POWDER	111	89

Reservoirs

Major reservoir storages statewide was 90 percent of average and 93 percent of last year. Reservoir storage west of the Continental Divide was 126 percent of average and 94 percent of last year. East of the Continental Divide, reservoir storage was 82 percent of average and 93 percent of last year.

RIVER BASIN	% OF AVERAGE	% OF LAST YEAR
COLUMBIA	126	94
KOOTENAI	144	84
FLATHEAD	115	103
UPPER CLARK FORK	91	110
BITTERROOT	74	80
LOWER CLARK FORK	119	106
MISSOURI	82	94
JEFFERSON	57	71
MADISON	106	103
GALLATIN	143	91
MISSOURI MAINSTEM	82	94
SMITH-JUDITH-MUSSELSHELL	28	66
SUN-TETON-MARIAS	88	93
MILK	13	44
ST. MARY	75	146
YELLOWSTONE	82	77
UPPER YELLOWSTONE	98	82
LOWER YELLOWSTONE	82	77

Streamflow

With normal spring and summer rain, streamflows in most areas are expected to be above those experienced last year. However, if the spring and early summer rains fall short, streams in the Upper Clark Fork, Missouri, and Yellowstone River basins could see flows similar to last year. Areas expected to have streamflows near average are the Kootenai and Flathead River Basins.

West of the Continental Divide, streamflow forecasts average between 76 and 86 percent of average and east of the Continental Divide, average between 54 and 65 percent of average.

Below are averaged river basin streamflow forecast summaries for the period April 1 through July 31. THESE FORECASTS ASSUME NEAR NORMAL SPRING CONDITIONS AND DO NOT ACCOUNT FOR WELL BELOW AVERAGE (70% or less) OR WELL ABOVE AVERAGE (130% or more) SNOWMELT OR SPRING RAIN. Specific forecast probabilities are available in each individual River Basin Report.

RIVER BASIN	April-July THIS YEAR % OF AVERAGE	April-July LAST YEAR % OF AVERAGE
COLUMBIA	76 to 86	46 to 50
KOOTENAI	83 to 92	42 to 45
FLATHEAD	78 to 87	47 to 51
UPPER CLARK FORK	57 to 69	50 to 59
BITTERROOT	80 to 89	47 to 51
LOWER CLARK FORK	84 to 92	42 to 45
MISSOURI	55 to 68	46 to 54
JEFFERSON	45 to 59	42 to 52
MADISON	71 to 78	64 to 68
GALLATIN	60 to 70	62 to 69
MISSOURI MAINSTEM	51 to 66	44 to 52
SMITH-JUDITH-MUSSELSHELL	41 to 53	35 to 42
SUN-TETON-MARIAS	72 to 90	32 to 40
MILK	48 to 63	24 to 29
ST. MARY	81 to 88	45 to 48
YELLOWSTONE	52 to 62	42 to 46
UPPER YELLOWSTONE	60 to 68	52 to 58
LOWER YELLOWSTONE	44 to 55	32 to 35

Surface Water Supply Index

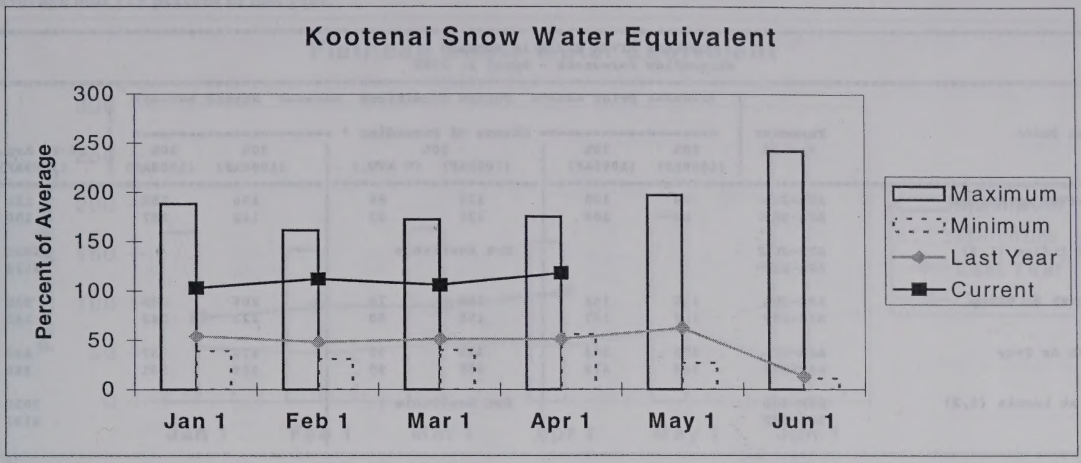
The Surface Water Supply Index (SWSI) is an indicator of surface water supply conditions for the spring and summer months. Water users that rely on mountain precipitation can use the index to evaluate seasonal surface water supplies. The SWSI accounts for mountain snowpack, mountain precipitation, streamflow, reservoir storage, and soil moisture.

SWSI RATING	SURFACE WATER CONDITION
+3.0 to +4.0	Extremely Wet
+2.0 to +3.0	Moderately Wet
+1.0 to +2.0	Slightly Wet
-1.0 to +1.0	Near Average
-1.0 to -2.0	Slightly Dry
-2.0 to -3.0	Moderately Dry
-3.0 to -4.0	Extremely Dry

SWSI	Basin
-1.4	Tobacco River
+0.6	Kootenai Ft. Steele to Libby Dam
+0.9	Kootenai River below Libby Dam
-1.2	Fisher River
+0.2	Yaak River
-0.4	North Fork Flathead River
-0.4	Middle FORK Flathead River
+0.1	South Fork Flathead River
-0.2	Flathead River at Columbia Falls
-2.3	Stillwater/Whitefish Rivers
+0.1	Swan River
-0.4	Flathead River at Polson
-0.2	Mission Valley
-2.9	Little Bitterroot River
-2.8	Clark Fork River above Milltown
-1.0	Blackfoot River
-0.8	Bitterroot River
-1.5	Clark Fork River below Bitterroot River
-0.8	Clark Fork River below Flathead River
-3.3	Beaverhead River
-2.8	Ruby River
-3.4	Big Hole River
-3.0	Boulder River (Jefferson)
-3.3	Jefferson River
-1.7	Madison River
-2.5	Gallatin River
-2.6	Missouri River above Canyon Ferry
-2.4	Missouri River below Canyon Ferry
-2.8	Smith River
-2.1	Sun River
-2.2	Teton River
-3.0	Birch/Dupuyer Creeks
-2.6	Marias River
-3.0	Musselshell River
-1.9	Missouri River above Ft. Peck
-2.1	Missouri River below Ft. Peck
-3.4	Milk River
-2.4	Dearborn River near Craig
-2.6	Yellowstone River above Livingston
-3.0	Shields River
-3.6	Boulder River (Yellowstone)
-3.5	Stillwater River
-3.6	Rock/Red Lodge Creeks
-3.1	Clarks Fork River
-2.9	Yellowstone River above Bighorn River
-3.9	Bighorn River below Bighorn Lake
-3.3	Little Bighorn River
-3.4	Yellowstone River below Bighorn River
-2.9	Tongue River
-3.5	Powder River

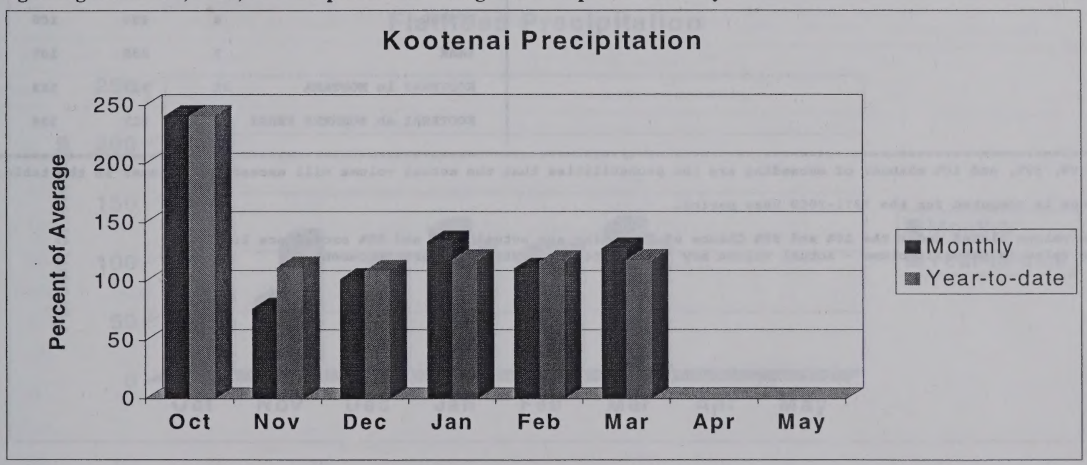
Kootenai River Basin in Montana

Snowpack conditions in the Kootenai River Basin were above average. Snow water content was 118 percent of average and 226 percent of last year.



January maximum swe was established in 1997 and minimum was in 1977; February maximum swe was in 1997 and minimum swe was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1974 and minimum swe was in 2001; May maximum swe was in 1974 and minimum swe was in 1977; and June maximum swe was in 1974 and minimum swe was in 1992. Average is for the period 1971 through 2000.

Mountain precipitation during March was 125 percent of average and 194 percent of last year. Valley precipitation during March was 166 percent of average and 311 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 118 percent of average and 258 percent of last year.



Lake Koocanusa storage was 144 percent of average and 84 percent of last year.

Surface Water Supply Index (SWSI) was -1.4 in the Tobacco River; +0.6 in the Kootenai Ft. Steele to Libby Dam; +0.9 in the Kootenai River below Libby Dam; -1.2 in the Fisher River; and +0.2 in the Yaak River.

KOOTENAI RIVER BASIN in Montana
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
TOBACCO RIVER nr Eureka	APR-JUL	78	100	115	85	130	152	136
	APR-SEP	83	108	125	83	142	167	150
LIBBY RES Inflow (1,2)	APR-JUL			Not Available				5638
	APR-SEP							6638
FISHER RIVER nr Libby	APR-JUL	115	154	180	78	206	245	230
	APR-SEP	127	167	195	80	223	263	245
YAAK RIVER nr Troy	APR-JUL	333	394	435	99	476	537	440
	APR-SEP	349	412	455	99	498	561	460
KOOTENAI at Leonia (1,2)	APR-JUL			Not Available				7035
	APR-SEP							8125

KOOTENAI RIVER BASIN in Montana
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
LAKE KOOCANUSA	5748.0	2508.0	2983.0	1743.7

KOOTENAI RIVER BASIN in Montana
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
KOOTENAY in CANADA	23	202	108
KOOTENAI MAINTSTEM	6	245	134
TOBACCO	3	258	118
FISHER	6	180	106
YAAK	7	238	109
KOOTENAI in MONTANA	21	227	118
KOOTENAI ab BONNERS FERRY	44	217	114

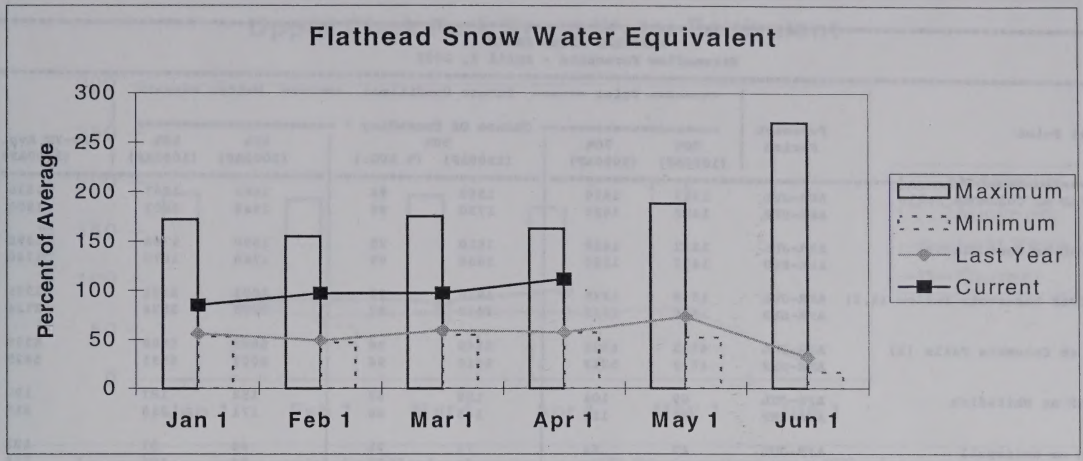
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

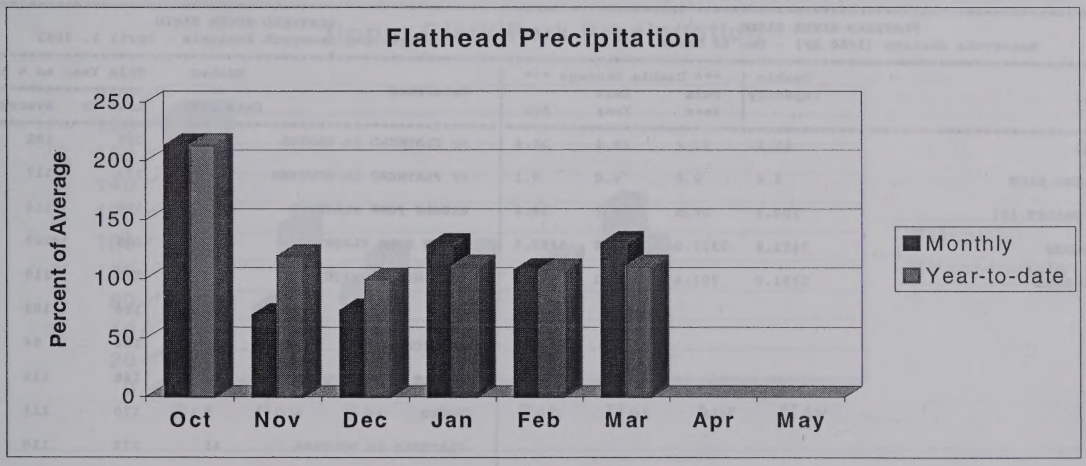
Flathead River Basin

Snowpack conditions in the Flathead River Basin were above average. Snow water content was 111 percent of average and 179 percent of last year.



January maximum swe was established in 1997 and minimum was in 2001; February maximum swe was in 1972 and minimum was in 2001; March maximum swe was in 1972 and minimum was in 2001; April maximum swe was in 1972 and minimum was in 2001; May maximum swe was in 1972 and minimum was in 1992; and June maximum swe was in 1974 and minimum was in 1992. Average is for the period 1971 through 2000.

Mountain precipitation during March was 131 percent of average and 164 percent of last year. Valley precipitation during March was 117 percent of average and 126 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 110 percent of average and 190 percent of last year.



Combined Camas reservoir storage was 53 percent of average and 66 percent of last year; Lower Jocko Lake was 0 percent of average and 0 percent of last year; combined Mission Valley reservoir storage was 79 percent of average and 82 percent of last year; Hungry Horse storage was 125 percent of average and 115 percent of last year; and Flathead Lake storage was 95 percent of average and 78 percent of last year.

Surface Water Supply Index (SWSI) was -0.4 in the North Fork Flathead River; -0.4 in the Middle Fork Flathead River; +0.1 in the South Fork Flathead River; -0.2 in the Flathead River at Columbia Falls; -2.3 in the Stillwater/Whitefish Rivers; +0.1 in the Swan River; -0.4 in the Flathead River at Polson; -0.2 in the Mission Valley; and -2.9 in the Little Bitterroot River.

FLATHEAD RIVER BASIN
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
NF FLATHEAD nr Columbia Falls	APR-JUL	1313	1460	1560	96	1660	1807	1630
	APR-SEP	1457	1620	1730	96	1840	2003	1800
MF FLATHEAD nr West Glacier	APR-JUL	1312	1430	1510	95	1590	1708	1590
	APR-SEP	1427	1560	1650	95	1740	1873	1740
HUNGRY HORSE Reservoir Inflow (1,2)	APR-JUL	1579	1827	1940	97	2053	2301	1995
	APR-SEP	1596	1915	2060	97	2205	2524	2124
FLATHEAD at Columbia Falls (2)	APR-JUL	4332	4825	5160	96	5495	5988	5355
	APR-SEP	4629	5213	5610	96	6007	6591	5825
STILLWATER nr Whitefish	APR-JUL	69	104	128	67	152	187	192
	APR-SEP	80	119	145	69	171	210	210
WHITEFISH nr Kalispell	APR-JUL	47	62	72	71	82	97	101
	APR-SEP	51	68	80	70	92	109	114
ASHLEY CREEK nr Marion	APR-JUL	0.79	3.01	4.52	63	6.92	10.44	7.19
	APR-SEP	0.58	2.94	4.55	68	6.91	10.40	6.72
SWAN RIVER nr Bigfork	APR-JUL	450	516	560	99	604	670	565
	APR-SEP	509	575	620	96	665	731	645
FLATHEAD Lake Inflow (1,2)	APR-JUL	4982	5655	5960	96	6265	6938	6200
	APR-SEP	5325	6106	6460	96	6814	7595	6713

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

FLATHEAD RIVER BASIN
Reservoir Storage (1000 AF) - End of March

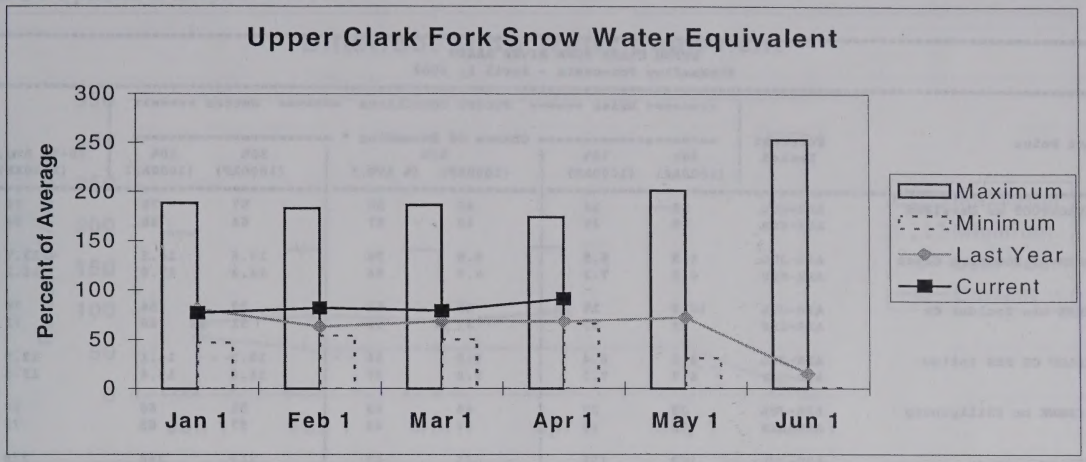
Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CAMAS (4)	45.2	13.4	20.4	25.4
LOWER JOCKO LAKE	6.4	0.0	0.0	0.1
MISSION VALLEY (8)	100.0	30.5	37.2	38.8
HUNGRY HORSE	3451.0	2357.0	2043.0	1886.7
FLATHEAD LAKE	1791.0	701.4	901.5	738.5

FLATHEAD RIVER BASIN
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
NF FLATHEAD in CANADA	2	208	102
NF FLATHEAD in MONTANA	9	233	117
MIDDLE FORK FLATHEAD	7	196	114
SOUTH FORK FLATHEAD	9	168	108
STILLWATER-WHITEFISH	10	197	110
SWAN	9	156	103
MISSION VALLEY	5	134	96
LITTLE BITTERROOT-ASHLEY	6	168	119
JOCKO	5	170	111
FLATHEAD in MONTANA	43	179	110
FLATHEAD RIVER BASIN	45	180	110

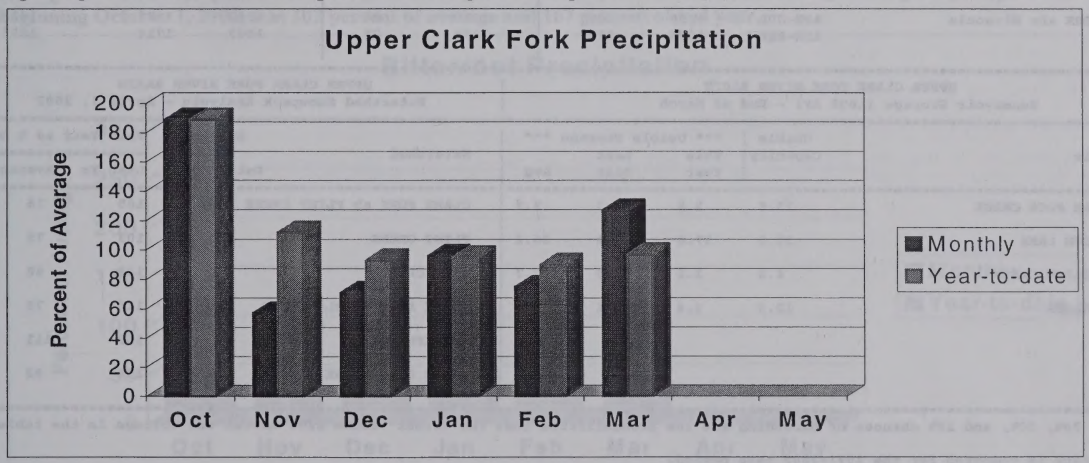
Upper Clark Fork River Basin

Snowpack conditions in the Upper Clark Fork River Basin were below average. Snow water content was 91 percent of average and 136 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum was in 1972 and minimum swe was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum was in 1994; May maximum swe was in 1972 and minimum swe was in 1977; and June maximum swe was in 1975 and minimum swe was in 1987. Average is for the period 1971 through 2000.

Mountain precipitation during March was 127 percent of average and 174 percent of last year. Valley precipitation during March was 127 percent of average and 144 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 97 percent of average and 134 percent of last year.



East Fork Rock Creek storage was 59 percent of average and 109 percent of last year; Georgetown Lake was 106 percent of average and 109 percent of last year; Lower Willow Creek was 78 percent of average and 131 percent of last year; and Nevada Creek storage was 84 percent of average and 105 percent of last year.

Surface Water Supply Index (SWSI) was -2.8 in the Clark Fork River above Milltown; and -1.0 in the Blackfoot River.

UPPER CLARK FORK RIVER BASIN
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
LITTLE BLACKFOOT nr Garrison	APR-JUL	22	34	42	55	57	79	76
	APR-SEP	25	39	48	57	64	88	84
FLINT CREEK nr Southern Cross	APR-JUL	4.3	6.5	8.0	58	10.6	14.5	13.7
	APR-SEP	4.5	7.2	9.0	56	12.2	17.0	16.2
FLINT CREEK blw Boulder Ck	APR-JUL	16.3	24	29	52	39	54	56
	APR-SEP	23	33	39	55	51	68	71
LOWER WILLOW CK RES Inflow	APR-JUL	4.1	6.4	8.0	64	10.5	14.1	12.5
	APR-SEP	4.7	7.3	9.0	67	11.6	15.4	13.5
MF ROCK CREEK nr Philipsburg	APR-JUL	28	37	44	69	51	60	64
	APR-SEP	32	43	50	69	57	68	72
ROCK CREEK nr Clinton	APR-JUL	102	151	185	69	219	268	270
	APR-SEP	123	178	215	71	252	307	305
NEVADA CREEK nr Finn	APR-JUL	3.4	8.5	12.0	69	15.5	21	17.3
	APR-SEP	3.9	9.3	13.0	69	16.7	22	18.9
BLACKFOOT RIVER nr Bonner	APR-JUL	573	696	780	97	864	987	805
	APR-SEP	643	775	865	97	955	1087	892
CLARK FORK abv Milltown	APR-JUL	202	353	455	75	557	708	605
	APR-SEP	242	411	525	75	639	808	705
CLARK FORK abv Missoula	APR-JUL	889	1080	1210	86	1340	1531	1415
	APR-SEP	1006	1217	1360	85	1503	1714	1595

UPPER CLARK FORK RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
EAST FORK ROCK CREEK	15.6	5.8	5.3	9.9
GEORGETOWN LAKE	31.0	27.8	25.4	26.2
LOWER WILLOW CREEK	4.9	2.1	1.6	2.7
NEVADA CREEK	12.6	6.4	6.1	7.6

UPPER CLARK FORK RIVER BASIN
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
CLARK FORK ab FLINT CREEK	16	105	76
FLINT CREEK	7	103	75
ROCK CREEK	6	138	88
CLARK FORK ab BLACKFOOT	25	115	79
BLACKFOOT	16	169	111
UPPER CLARK FORK BASIN	39	136	92

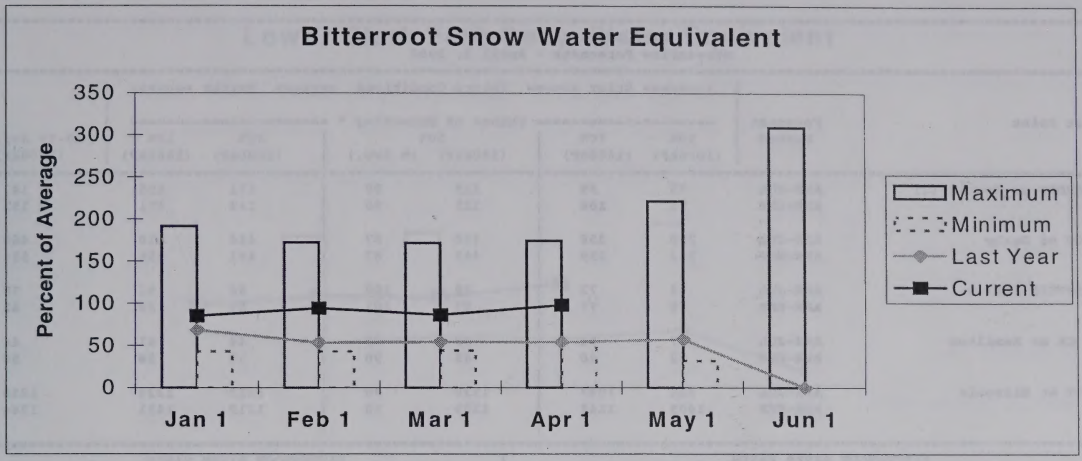
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

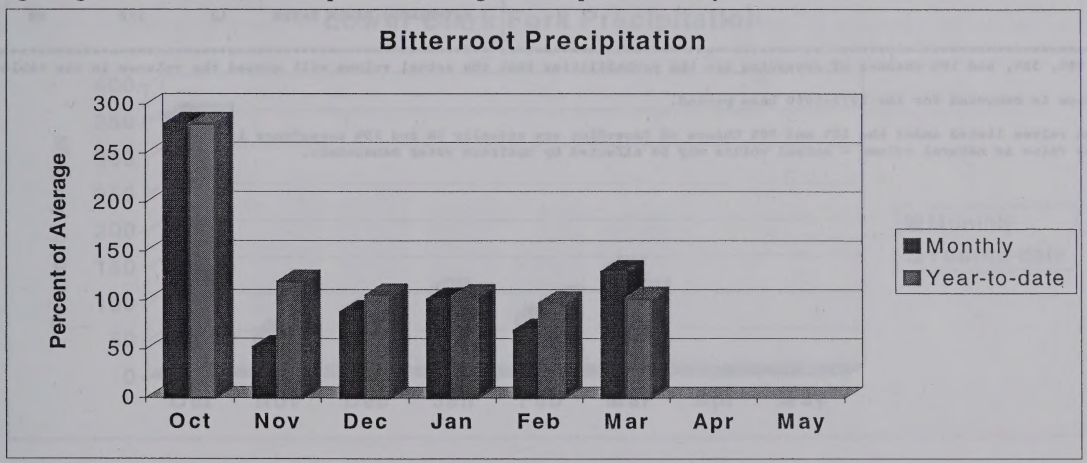
Bitterroot River Basin

Snowpack conditions in the Bitterroot River Basin were near average. Snow water content was 98 percent of average and 178 percent of last year.



January maximum swe was established in 1997 and minimum swe in 1977; February maximum swe was in 1972 and minimum was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum swe was in 2001; May maximum swe was in 1972 and minimum swe was in 1987; and June maximum swe was 1972 and 1974 and minimum swe was in 1987, 1992, 1994, and 2001. Average is for the period 1971 through 2000.

Mountain precipitation during March was 128 percent of average and 177 percent of last year. Valley precipitation during March was 149 percent of average and 173 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 102 percent of average and 167 percent of last year.



Painted Rocks Lake storage was 62 percent of average and 55 percent of last year and Como storage was 81 percent of average and 102 percent of last year.

Surface Water Supply Index (SWSI) was -0.8 in the Bitterroot River.

BITTERROOT RIVER BASIN
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
WF BITTERROOT nr Conner (2)	APR-JUL	75	99	115	80	131	155	143
	APR-SEP	79	106	125	80	144	171	157
BITTERROOT nr Darby	APR-JUL	290	356	400	87	444	510	460
	APR-SEP	332	399	445	87	491	558	514
COMO RESERVOIR Inflow	APR-JUL	64	72	78	100	84	92	78
	APR-SEP	68	77	83	101	89	98	82
SKALKAHO CK nr Hamilton	APR-JUL	27	34	39	89	44	51	44
	APR-SEP	32	40	45	90	50	58	50
BITTERROOT at Missoula	APR-JUL	924	1047	1130	90	1213	1336	1250
	APR-SEP	1009	1141	1230	90	1319	1451	1364

BITTERROOT RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
PAINTED ROCKS LAKE	31.7	6.0	11.0	9.6
COMO	34.9	12.5	12.2	15.5

BITTERROOT RIVER BASIN
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
WEST FORK BITTERROOT	3	155	90
EAST SIDE BITTERROOT	6	154	89
WEST SIDE BITTERROOT	4	208	108
BITTERROOT RIVER BASIN	12	178	98

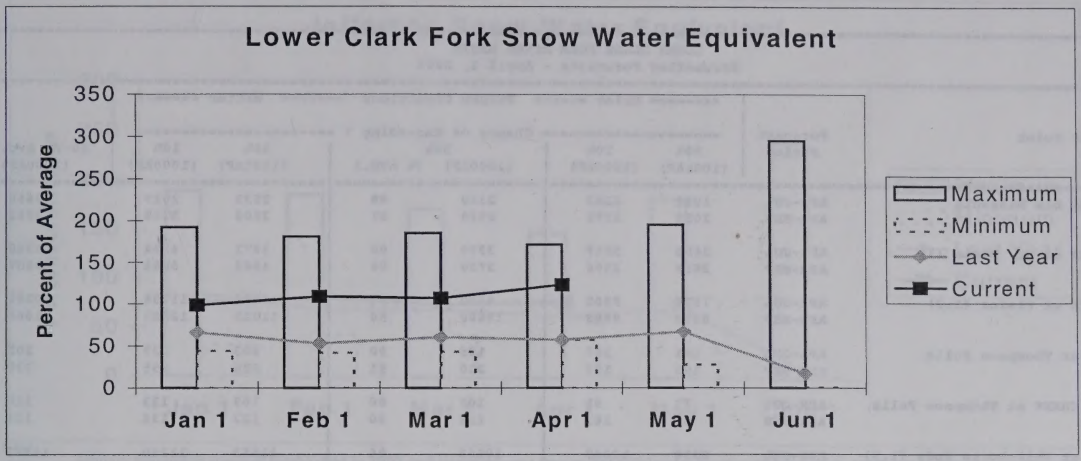
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

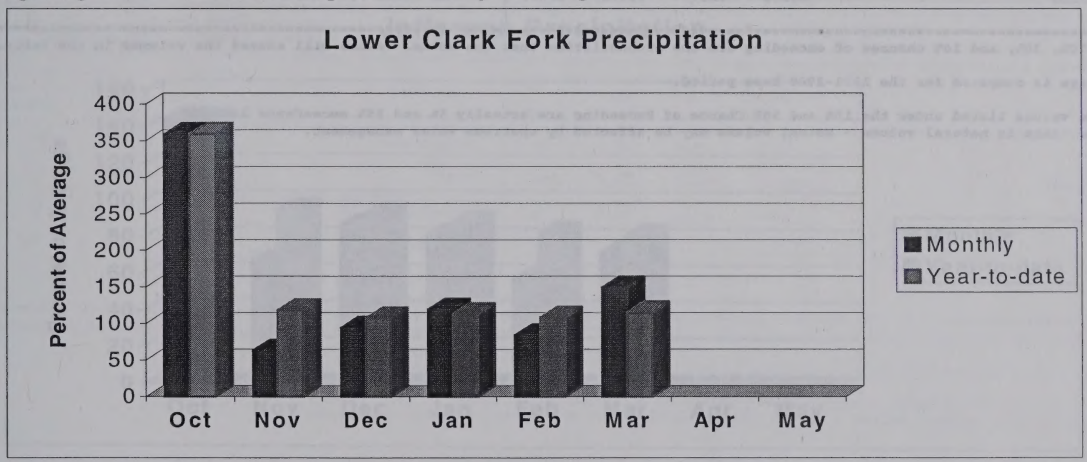
Lower Clark Fork River Basin

Snowpack conditions in the Lower Clark Fork River Basin were above average. Snow water content was 123 percent of average and 209 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum swe was in 1972 and minimum swe was in 1977; March maximum swe was in 1972 and minimum was in 1977; April maximum swe was in 1972 and minimum swe was in 1981; May maximum swe was in 1972 and minimum swe was in 1977; and June maximum swe was in 1974 and minimum swe was in 1977. Average is for the period 1971 through 2000.

Mountain precipitation during March was 154 percent of average and 230 percent of last year. Valley precipitation during March was 115 percent of average and 192 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 115 percent of average and 209 percent of last year.



Noxon Rapids storage was 119 percent of average and 106 percent of last year.

Surface Water Supply Index (SWSI) was -1.5 in the Clark Fork River below Bitterroot River and -0.8 in the Clark Fork River below Flathead River.

LOWER CLARK FORK RIVER BASIN
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
CLARK FORK blw Missoula	APR-JUL	1851	2142	2340	88	2538	2829	2660
	APR-SEP	2052	2372	2590	87	2808	3128	2962
CLARK FORK at St. Regis (1)	APR-JUL	2406	3069	3370	96	3671	4334	3520
	APR-SEP	2659	3396	3730	96	4064	4801	3907
CLARK FORK nr Plains (1,2)	APR-JUL	7576	9002	9650	96	10298	11724	10100
	APR-SEP	8319	9888	10600	96	11312	12881	11060
THOMPSON nr Thompson Falls	APR-JUL	141	167	185	90	203	229	205
	APR-SEP	165	192	210	91	228	255	230
PROSPECT CREEK at Thompson Falls	APR-JUL	77	91	100	86	109	123	116
	APR-SEP	88	102	112	90	122	136	124
CLARK FK at Whitehorse Rpds (1,2)	APR-JUL	8390	10047	10800	96	11553	13210	11280
	APR-SEP	9248	11072	11900	96	12728	14552	12460

LOWER CLARK FORK RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
NOXON RAPIDS	335.0	325.9	306.2	272.9

LOWER CLARK FORK RIVER BASIN
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
LOWER CLARK FORK BASIN	14	209	123

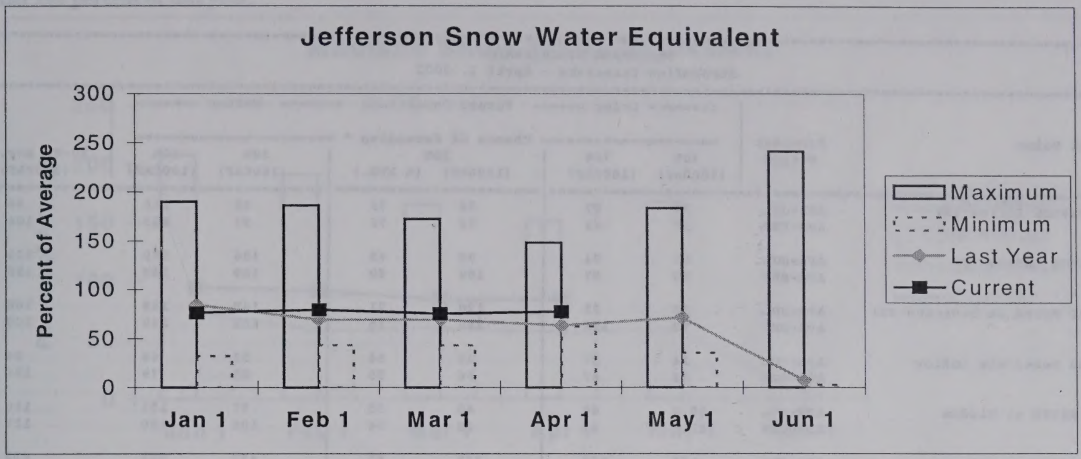
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

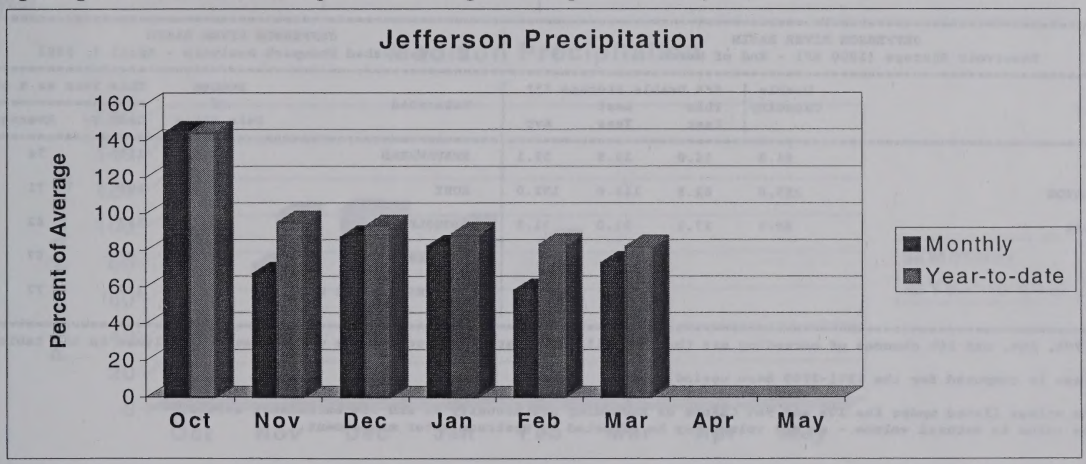
Jefferson River Basin

Snowpack conditions in the Jefferson River Basin were below average. Snow water content was 77 percent of average and 117 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum swe was in 1997 and minimum was in 1977; March maximum swe was in 1972 and minimum was in 1977; April maximum swe was in 1997 and minimum was in 1977; May maximum swe was in 1975 and minimum swe was in 1977; and June maximum swe was in 1982 and minimum in 1987. Average is for the period 1971 through 2000.

Mountain precipitation during March was 73 percent of average and 107 percent of last year. Valley precipitation during March was 72 percent of average and 149 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 82 percent of average and 110 percent of last year.



Lima storage was 41 percent of average and 63 percent of last year; Clark Canyon storage was 54 percent of average and 69 percent of last year; and Ruby River storage was 86 percent of average and 87 percent of last year.

Surface Water Supply Index (SWSI) was -3.3 in the Beaverhead River; -2.8 in the Ruby River; -3.4 in the Big Hole River; -3.0 in the Boulder River; and -3.3 in the Jefferson River as a whole.

JEFFERSON RIVER BASIN
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
LIMA RESERVOIR Inflow (2)	APR-JUL	34	57	72	75	88	110	96
	APR-SEP	35	61	79	76	97	123	104
CLARK CANYON Inflow (2)	APR-JUL	51	74	90	69	106	129	131
	APR-SEP	56	87	108	69	129	160	156
BEAVERHEAD RIVER at Barretts (2)	APR-JUL	52	92	120	71	148	188	168
	APR-SEP	70	118	150	75	182	230	200
RUBY RIVER Reservoir Inflow	APR-JUL	24	37	45	54	53	66	84
	APR-SEP	33	47	56	55	65	79	101
BIG HOLE RIVER at Wisdom	APR-JUL	10.0	40	60	55	97	151	110
	APR-SEP	11.0	43	65	56	104	160	117
BIG HOLE RIVER nr Melrose	APR-JUL	142	257	335	55	413	528	610
	APR-SEP	159	285	370	56	455	581	660
BOULDER RIVER nr Boulder	APR-JUL	19.6	35	46	59	64	91	78
	APR-SEP	22	40	52	61	72	101	85
WILLOW CREEK Reservoir Inflow	APR-JUL	2.8	5.7	7.7	43	12.3	19.1	17.9
	APR-SEP	2.9	6.4	8.8	44	14.2	22	20
JEFFERSON RIVER nr Three Forks (2)	APR-JUL	112	272	380	49	488	648	780
	APR-SEP	147	316	430	50	544	713	860

JEFFERSON RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
LIMA	84.0	16.0	25.5	39.1
CLARK CANYON	255.6	82.8	119.6	152.0
RUBY RIVER	38.8	27.1	31.0	31.5

JEFFERSON RIVER BASIN
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
BEAVERHEAD	18	110	74
RUBY	10	103	71
BIGHOLE	21	132	82
BOULDER	9	87	67
JEFFERSON RIVER BASIN	48	117	77

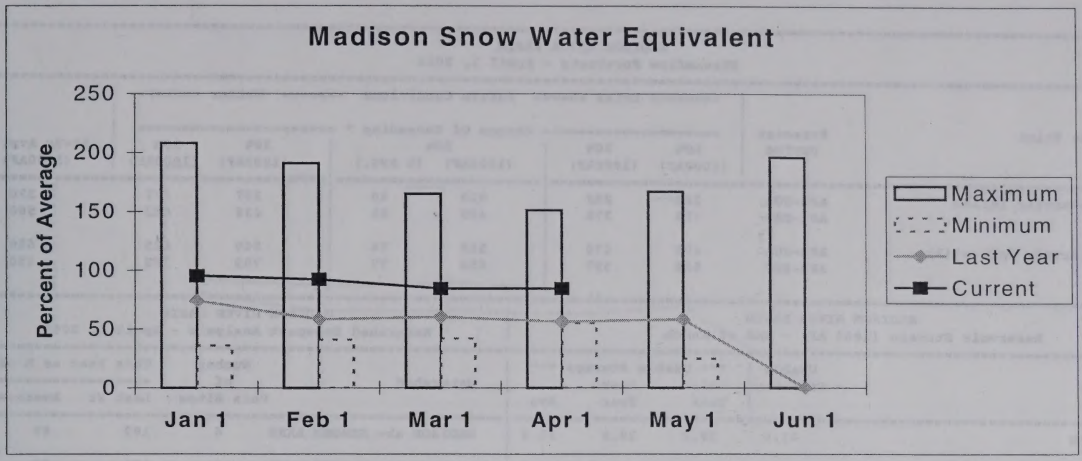
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

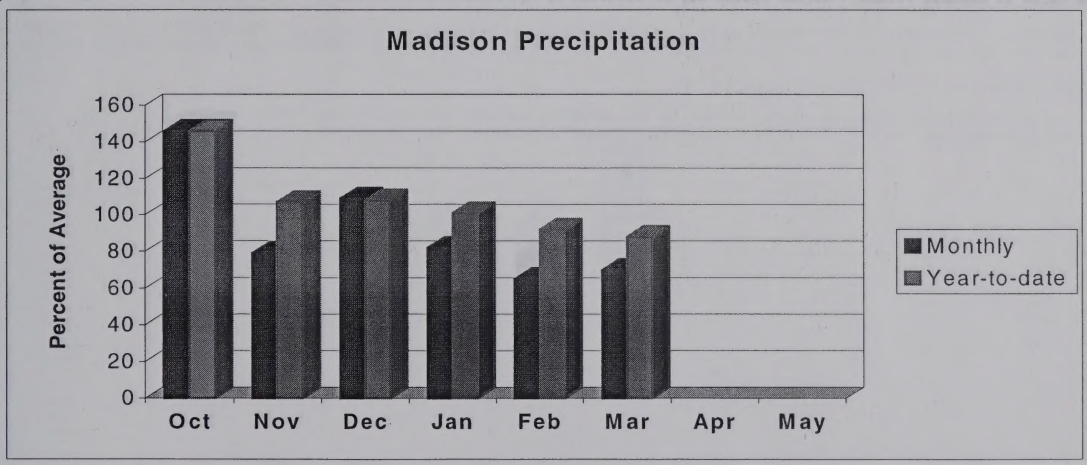
Madison River Basin

Snowpack conditions in the Madison River Basin were below average. Snow water content was 84 percent of average and 148 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum swe was in 1997 and minimum was in 1977; March maximum swe was in 1997 and minimum was in 1977; April maximum swe was in 1997 and minimum was in 1977; May maximum swe was in 1997 and minimum swe was in 1977; and June maximum swe was in 1995 and minimum in 2001. Average is for the period 1971 through 2000.

Mountain and valley precipitation during March was 70 percent of average and 128 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 88 percent of average and 136 percent of last year.



Ennis Lake storage was 94 percent of average and 98 percent of last year and Hebgen Lake storage was 108 percent of average and 104 percent of last year.

Surface Water Supply Index (SWSI) was -1.7 for the Madison River.

MADISON RIVER BASIN
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
HEBGEN Reservoir Inflow	APR-JUL	243	283	310	80	337	377	390
	APR-SEP	328	374	405	81	436	482	500
ENNIS Reservoir Inflow (2)	APR-JUL	405	470	515	76	560	625	680
	APR-SEP	518	597	650	77	703	782	850

MADISON RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ENNIS LAKE	41.0	29.2	29.9	31.2
HEBGEN LAKE	377.5	279.9	270.4	259.6

MADISON RIVER BASIN
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
MADISON abv HEBGEN LAKE	6	182	89
MADISON blw HEBGEN LAKE	11	131	80
MADISON RIVER BASIN	17	148	84

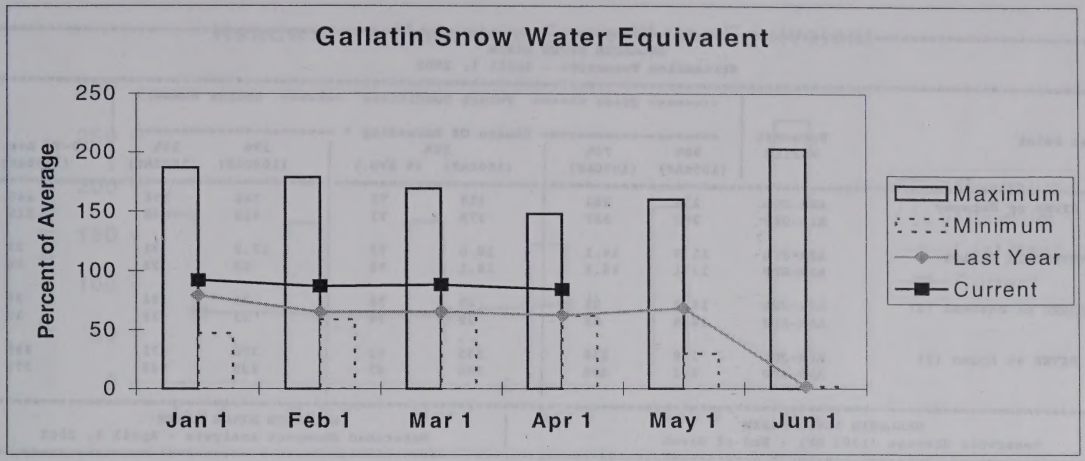
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

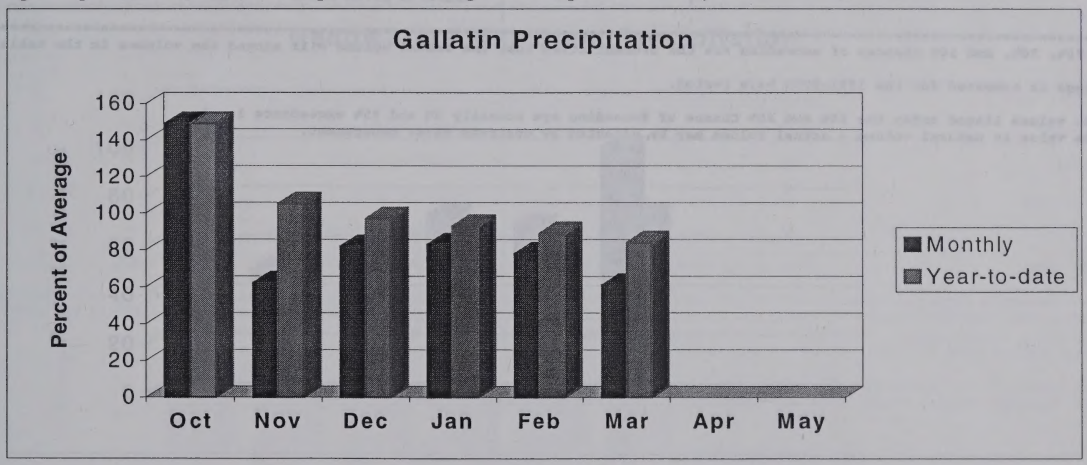
Gallatin River Basin

Snowpack conditions in the Gallatin River Basin were below average. Snow water content was 84 percent of average and 131 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1966; February maximum swe was in 1997 and minimum was in 1977; March maximum swe was in 1997 and minimum was in 1977; April maximum swe was in 1997 and minimum was in 2001; May maximum swe was in 1970 and minimum swe was in 1987; and June maximum swe was in 1975 and minimum in 2001. Average is for the period 1971 through 2000.

Mountain precipitation during March was 61 percent of average and 89 percent of last year. Valley precipitation during March was 41 percent of average and 78 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 84 percent of average and 128 percent of last year.



Middle Creek storage was 143 percent of average and 91 percent of last year.

Surface Water Supply Index (SWSI) was -2.5 for the Gallatin River.

GALLATIN RIVER BASIN
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
GALLATIN RIVER nr Gateway	APR-JUL	234	282	315	72	348	396	440
	APR-SEP	282	337	375	73	413	468	515
HYALITE RESERVOIR Inflow	APR-JUL	11.3	14.1	16.0	73	17.9	21	22
	APR-SEP	13.1	16.1	18.1	72	20	23	25
HYALITE CREEK nr Bozeman (2)	APR-JUL	16.0	21	25	74	29	34	34
	APR-SEP	18.8	25	29	74	33	39	39
GALLATIN RIVER at Logan (2)	APR-JUL	139	238	305	62	372	471	495
	APR-SEP	174	285	360	63	435	546	570

GALLATIN RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MIDDLE CREEK	10.2	6.7	7.4	4.7

GALLATIN RIVER BASIN
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER GALLATIN	7	139	87
HYALITE	4	112	76
BRIDGER	3	130	88
GALLATIN RIVER BASIN	14	130	84

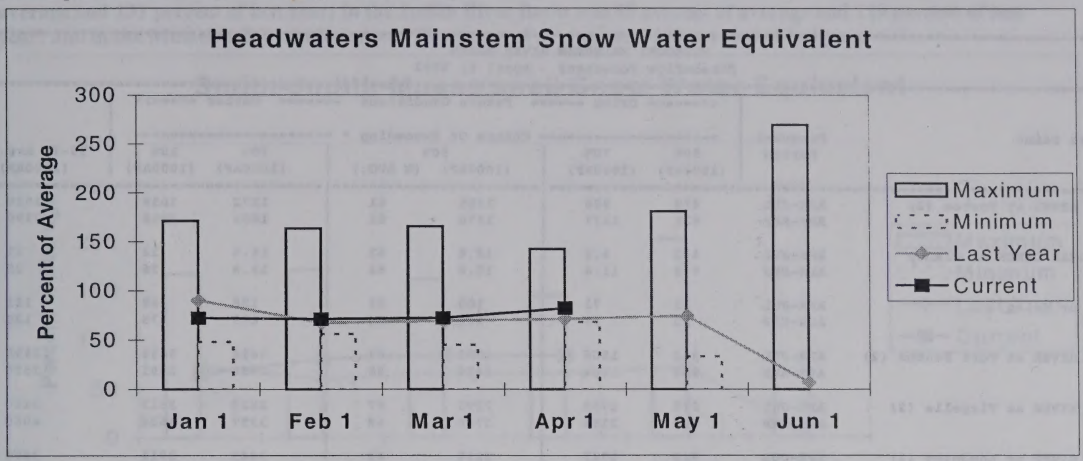
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

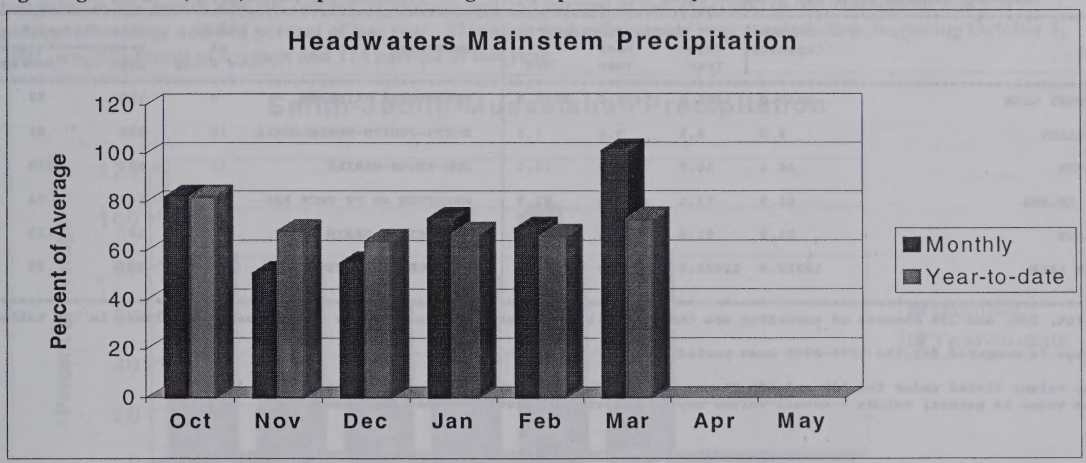
Missouri Mainstem River Basin

Snowpack conditions in the Headwaters Missouri Mainstem River Basin were below average. Snow water content was 82 percent of average and 110 percent of last year.



January maximum swe was established in 1997 and minimum swe in 1977; February maximum swe was in 1972 and minimum swe was in 1977; March maximum swe in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum swe was in 1961 and 1966; May maximum swe was in 1975 and minimum swe was in 1977; and June maximum swe was in 1975 and minimum swe was in 1992. Average is for the period 1971 through 2000.

Mountain precipitation during March was 103 percent of average and 132 percent of last year. Valley precipitation during March was 100 percent of average and 385 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 73 percent of average and 90 percent of last year.



Canyon Ferry Lake storage was 95 percent of average and 96 percent of last year; Helena Valley storage was 105 percent of average and 76 percent of last year; Lake Helena storage was 82 percent of average and 98 percent of last year; Hauser & Helena storage was 116 percent of average and 116 percent of last year; Holter Lake storage was 110 percent of average and 100 percent of last year; and Fort Peck Lake storage was 80 percent of average and 94 percent of last year.

Surface Water Supply Index (SWSI) was -2.6 in the Missouri River above Canyon Ferry; -2.4 in the Missouri River below Canyon Ferry; -1.9 in the Missouri River above Fort Peck; and -2.1 in the Missouri River below Fort Peck.

MISSOURI MAINSTEM RIVER BASIN
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
MISSOURI RIVER at Toston (2)	APR-JUL	472	938	1255	61	1572	2038	2050
	APR-SEP	621	1137	1470	62	1803	2318	2390
PRICKLY PEAR CREEK nr Clancy	APR-JUL	4.2	9.4	13.0	62	16.6	22	21
	APR-SEP	5.2	11.4	15.6	62	19.8	26	25
DEARBORN nr Craig	APR-JUL	31	72	100	83	128	169	121
	APR-SEP	35	77	105	84	133	175	125
MISSOURI RIVER at Fort Benton (2)	APR-JUL	942	1566	1990	67	2414	3038	2990
	APR-SEP	964	1904	2430	68	2956	3891	3570
MISSOURI RIVER at Virgelle (2)	APR-JUL	977	1762	2295	67	2828	3613	3450
	APR-SEP	893	2163	2760	68	3357	4628	4060
MISSOURI RIVER nr Landusky (2)	APR-JUL	940	1747	2295	62	2843	3911	3690
	APR-SEP	827	2202	2790	64	3378	4742	4350
MISSOURI RIVER below Fort Peck (2)	APR-JUL	598	1951	2480	66	3009	4301	3740
	APR-SEP	650	2277	2850	66	3423	5066	4330
LAKE SAKAKAWEA Inflow (2)	APR-JUL	2727	5229	6025	62	6821	9253	9740
	APR-SEP	3136	5887	6850	61	7813	10640	11200

MISSOURI MAINSTEM RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CANYON FERRY LAKE	2043.0	1395.0	1449.0	1467.8
HELENA VALLEY	9.2	4.1	5.4	3.9
LAKE HELENA	10.4	10.7	10.9	13.1
HAUSER & HELENA	61.9	73.1	63.1	62.8
HOLTER LAKE	81.9	81.4	81.3	74.1
FORT PECK LAKE	18910.0	12020.0	12800.0	14966.0

MISSOURI MAINSTEM RIVER BASIN
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
HEADWATERS MAINSTEM	9	110	82
SMITH-JUDITH-MUSSELSHELL	18	124	83
SUN-TETON-MARIAS	14	183	110
MAINSTEM ab FT PECK RES	40	144	94
MILK RIVER BASIN	4	187	111
MISSOURI MAINSTEM BASIN	43	142	93

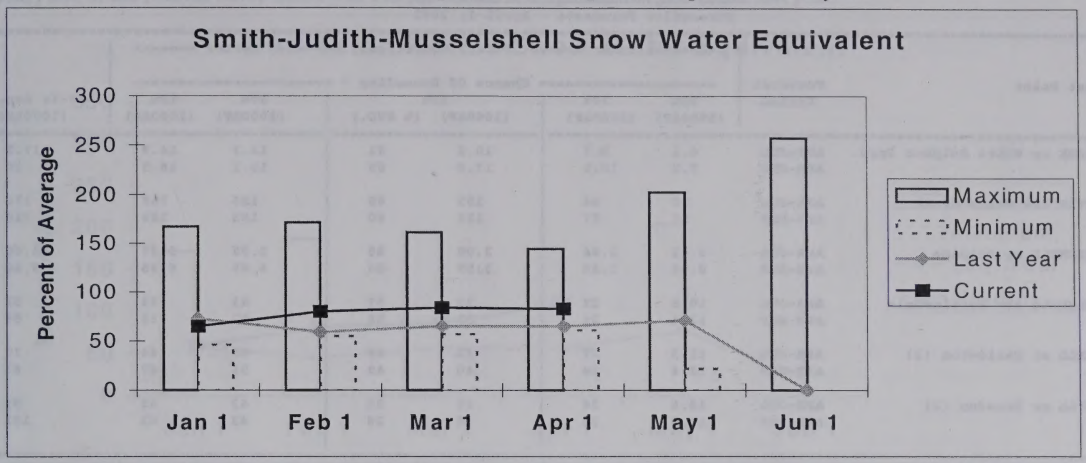
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

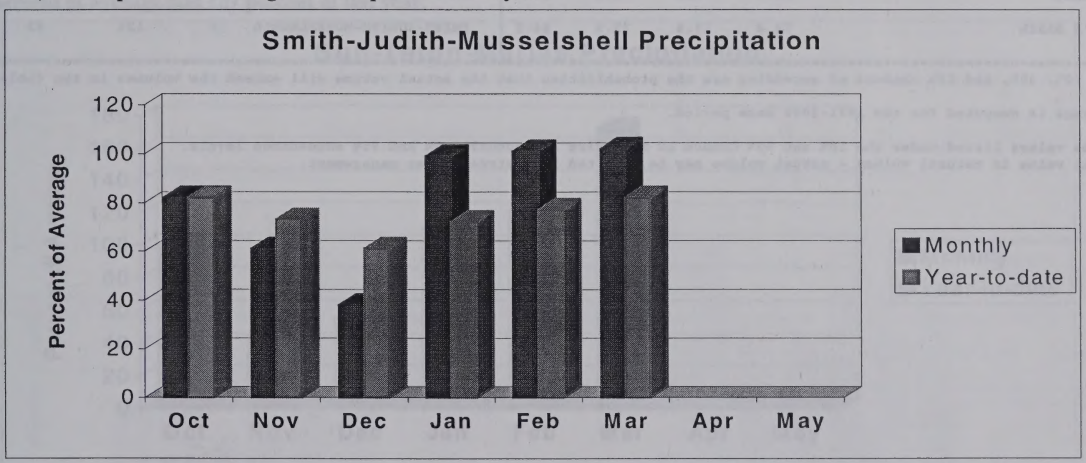
Smith-Judith-Musselshell River Basins

Snowpack conditions in the Smith-Judith-Musselshell River Basins were below average. Snow water content was 83 percent of average and 124 percent of last year. Snow water content in the Smith River Basin was 83 percent of average and 131 percent of last year; in the Judith River Basin was 85 percent of average and 119 percent of last year; and in the Musselshell Basin River was 78 percent of average and 130 percent of last year.



January maximum swe was established in 1997 and minimum swe in 1988; February maximum swe was in 1978 and minimum swe was in 1987; March maximum swe was in 1978 and minimum swe was in 1987; April maximum swe was in 1970 and minimum swe was in 1992; and May maximum swe was in 1970 and minimum swe was in 1987; and June maximum swe was in 1967 and minimum swe was in 1987, 1992, 1994, and 2001. Average is for the period 1971 through 2000.

Mountain and valley precipitation during March in the Smith-Belts was 100 percent of average and 142 percent of last year; in the Judith was 100 percent of average and 153 percent of last year; and in the Musselshell was 120 percent of average and 246 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 82 percent of average and 114 percent of last year.



Smith River storage was 26 percent of average and 68 percent of last year; Bair storage was 47 percent of average and 117 percent of last year; Martinsdale storage was 0 percent of average and 0 percent of last year; and Deadman's Basin was 32 percent of average and 68 percent of last year.

Surface Water Supply Index (SWSI) was -2.8 in the Smith River and -3.0 in the Musselshell River.

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SHEEP CREEK nr White Sulphur Spgs.	APR-JUL	6.1	8.7	10.5	61	12.3	14.9	17.1
	APR-SEP	7.7	10.9	13.0	65	15.1	18.3	20
SMITH RIVER abv Eagle Creek	APR-JUL	52	84	105	60	126	158	175
	APR-SEP	56	97	125	60	153	194	210
NF MUSSELSHELL nr Delpine	APR-JUL	0.63	2.04	3.00	65	3.96	5.37	4.60
	APR-SEP	0.84	2.45	3.55	66	4.65	6.26	5.40
SF MUSSELSHELL abv Martinsdale	APR-JUL	10.8	22	30	57	43	62	52
	APR-SEP	12.4	24	33	58	47	68	56
MUSSELSHELL at Harlowton (2)	APR-JUL	11.3	27	38	49	48	64	77
	APR-SEP	12.4	29	40	49	51	67	81
MUSSELSHELL nr Roundup (2)	APR-JUL	18.6	24	28	28	42	62	99
	APR-SEP	18.0	24	28	28	42	62	102

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
SMITH RIVER	10.6	1.9	2.8	7.4
BAIR	7.0	2.1	1.8	4.5
MARTINSDALE	23.1	0.0	2.4	10.9
DEADMAN'S BASIN	72.2	17.4	25.5	54.2

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SMITH	9	131	83
JUDITH	8	119	85
MUSSELSHELL	8	130	78
SMITH-JUDITH-MUSSELSHELL	18	124	83

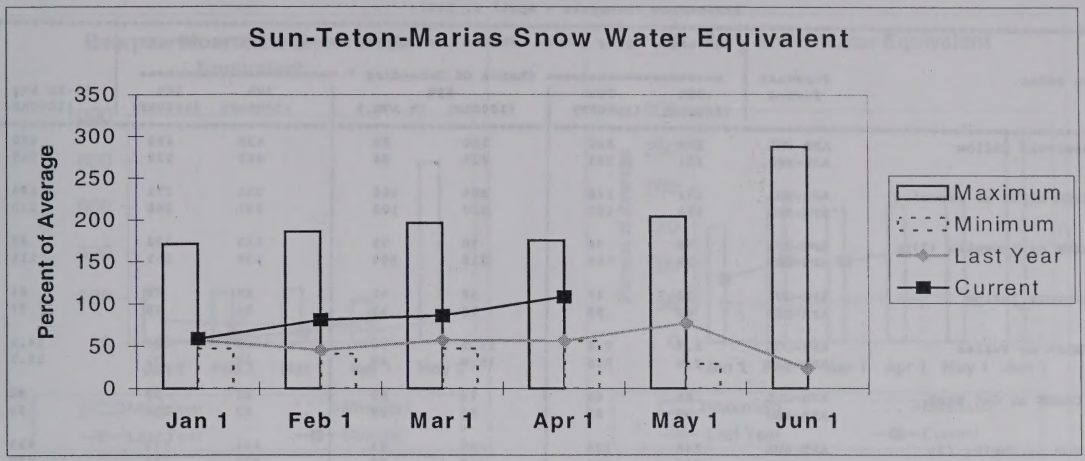
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

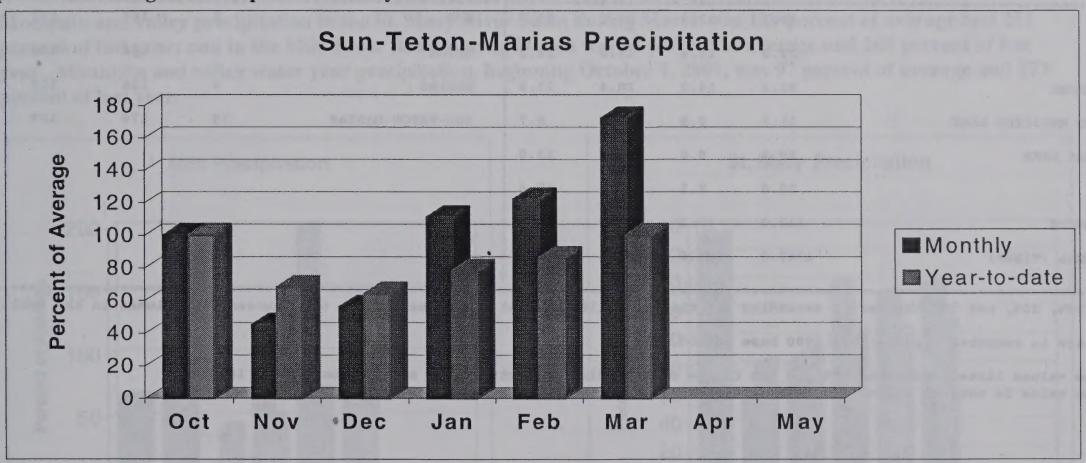
Sun-Teton-Marias River Basins

Snowpack conditions in the Sun-Teton-Marias River Basins were slightly above average. Snow water content was 108 percent of average and 176 percent of last year. Snow water content in the Sun River Basin was 107 percent of average and 169 percent of last year; in the Teton River Basin was 108 percent of average and 167 percent of last year; and in the Marias River Basin was 112 percent of average and 194 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1988; February maximum swe was in 1972 and minimum swe was in 2001; March maximum swe was in 1972 and minimum swe was in 1984; April maximum swe was in 1972 and minimum swe was in 1984; May maximum swe was in 1972 and minimum swe was in 1977; and June maximum was in 1972 and minimum swe was in 1987, 1992, and 1998. Average is for the period 1971 through 2000.

Mountain and valley precipitation during March in the Sun was 188 percent of average and 336 percent of last year; in the Teton was 180 percent of average and 270 percent of last year; and in the Marias was 164 percent of average and 240 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 100 percent of average and 157 percent of last year.



Gibson storage was 99 percent of average and 110 percent of last year; Pishkun storage was 108 percent of average Gibson storage was 61 percent of average and 134 percent of last year; Pishkun storage was 107 percent of average and 103 percent of last year; Willow Creek storage was 60 percent of average and 70 percent of last year; Lower Two Medicine Lake storage was 0 percent of average and 0 percent of last year; Four Horns Lake storage was 0 percent of average and 0 percent of last year; Swift storage was 41 percent of average and 111 percent of last year; Lake Frances storage was 36 percent of average and 110 percent of last year; and Lake Elwell (Tiber) storage was 101 percent of average and 94 percent of last year.

Surface Water Supply Index (SWSI) was -2.1 in the Sun River; -2.2 in the Teton River; -3.0 in the Birch/Dupuyer Creeks; -2.7 in the Marias above Tiber Reservoir; and -2.6 in the Marias below Tiber Reservoir.

SUN-TETON-MARIAS RIVER BASINS
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
GIBSON Reservoir Inflow	APR-JUL	280	340	380	83	420	480	460
	APR-SEP	321	383	425	84	467	529	505
TWO MEDICINE RIVER nr Browning	APR-JUL	139	178	205	100	232	271	205
	APR-SEP	154	193	220	102	247	286	215
BADGER CREEK nr Browning (2)	APR-JUL	64	84	98	99	112	132	99
	APR-SEP	79	100	115	100	130	151	115
SWIFT RESERVOIR Inflow	APR-JUL	32	47	58	91	69	84	64
	APR-SEP	42	59	70	91	81	98	77
DUPUYER CREEK nr Valier	APR-JUL	1.7	7.4	13.5	96	19.9	29	14.0
	APR-SEP	2.0	8.5	15.0	96	22	32	15.7
CUT BANK CREEK at Cut Bank	APR-JUL	45	61	72	89	83	99	81
	APR-SEP	50	68	80	89	92	110	90
MARIAS RIVER nr Shelby (2)	APR-JUL	238	326	385	93	444	532	415
	APR-SEP	262	350	410	93	470	558	440
TETON nr Dutton	APR-JUL	10.9	26	36	71	50	71	51
	APR-SEP	16.0	31	41	70	56	77	59

SUN-TETON-MARIAS RIVER BASINS
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
GIBSON	99.1	32.9	24.6	53.6
PISHKUN	32.0	19.6	19.0	18.3
WILLOW CREEK	32.2	14.2	20.4	23.8
LOWER TWO MEDICINE LAKE	11.9	0.0	6.4	9.7
FOUR HORNS LAKE	19.2	0.0	13.0	12.0
SWIFT	30.0	7.1	6.4	17.4
LAKE FRANCES	112.0	25.2	23.0	69.1
LAKE ELWELL (TIBER)	1347.0	651.6	694.2	645.6

SUN-TETON-MARIAS RIVER BASINS
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SUN	7	169	107
TETON	4	168	108
MARIAS	6	194	112
SUN-TETON-MARIAS	15	176	109

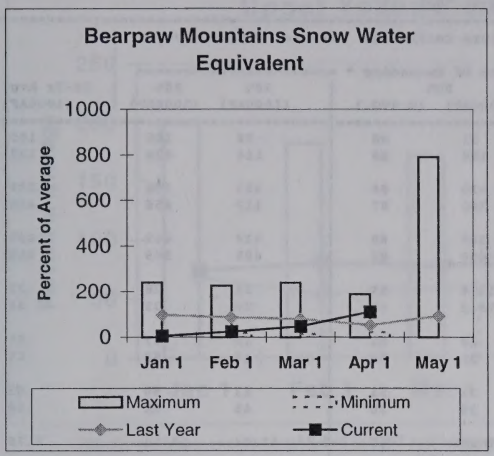
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

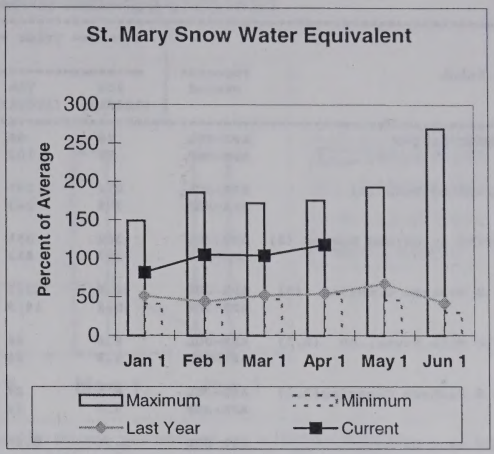
The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

St. Mary and Milk River Basins

Snow water content in the Saint Mary River Basin was 118 percent of average and 208 percent of last year. The Milk River Basin (Bearpaw Mountains) was 111 percent of average and 187 percent of last year.

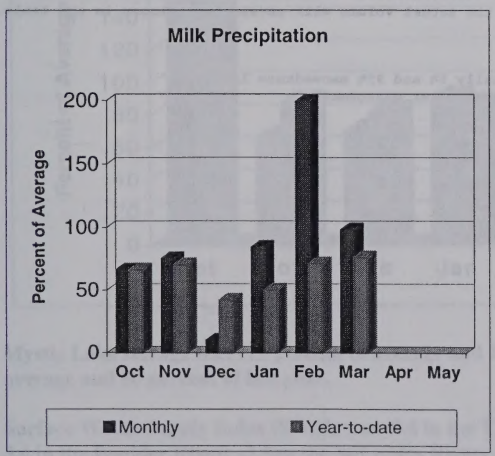


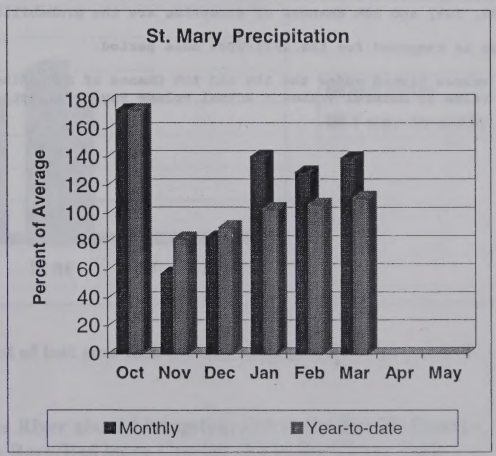


Bearpaw - January maximum swe was established in 1978 and minimum swe was in 1981; February maximum swe was 1978 and minimum was in 1973; March maximum swe was 1978 and minimum swe was 1995; April maximum swe was in 1985 and minimum swe was in 1973, 1983, and 1986; May maximum swe was 1975 and the minimum, 0.0, has occurred in several years. Average is for the period 1971 through 2000.

St. Mary - January maximum swe was established in 1997 and minimum swe was in 1988; February maximum swe was in 1972 and minimum swe was in 2001; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum swe was in 1967; May maximum swe was in 19972 and minimum swe was in 1977; and June maximum swe was in 1972 and minimum swe was 1992. Average is for the period 1971 through 2000.

Mountain and valley precipitation in the St. Mary River Basin during March was 139 percent of average and 211 percent of last year; and in the Milk River Basin during March was 98 percent of average and 265 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 97 percent of average and 177 percent of last year.





Fresno storage was 4 percent of average and 17 percent of last year; Beaver Creek storage was 20 percent of average and 20 percent of last year; and Nelson storage was 31 percent of average and 91 percent of last year.

Surface Water Supply Index (SWSI) was -3.0 for the Milk River.

ST. MARY and MILK RIVER BASINS
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
LAKE SHERBURNE Inflow	APR-JUL	78	86	92	88	98	106	105
	APR-SEP	92	102	108	89	114	124	122
ST. MARY RIVER nr Babb (2)	APR-JUL	272	307	330	86	353	388	385
	APR-SEP	324	363	390	87	417	456	450
ST. MARY RIVER at US/CAN Border (2)	APR-JUL	302	351	385	89	419	468	435
	APR-SEP	357	412	450	87	488	543	515
MILK RIVER @ Western Crossing (3)	APR-JUL	4.9	13.2	17.4	53	22	28	33
	APR-SEP	5.4	14.9	19.2	53	26	32	36
MILK RIVER @ Milk River, AB (2,3)	APR-JUL	8.8	24	28	51	39	47	55
	APR-SEP	9.3	26	31	50	44	52	62
MILK RIVER @ Eastern Crossing(2,3)	APR-JUL	8.5	27	31	51	42	50	61
	APR-SEP	9.7	31	35	50	45	61	69
BEAVER CREEK near Havre	APR-JUL	1.36	5.46	8.25	95	11.04	15.14	8.70

ST. MARY and MILK RIVER BASINS
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
LAKE SHERBURNE	64.3	18.6	12.7	24.8
FRESNO	127.0	3.2	19.0	75.0
BEAVER CREEK	3.5	0.5	2.5	2.5
NELSON	66.8	11.2	12.3	35.6

ST. MARY and MILK RIVER BASINS
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
ST. MARY	3	208	118
BEARPAW MOUNTAINS	4	187	111
CYPRESS HILLS, CANADA	0	0	0
MILK RIVER BASIN	4	187	111
ST. MARY & MILK BASINS	7	205	117

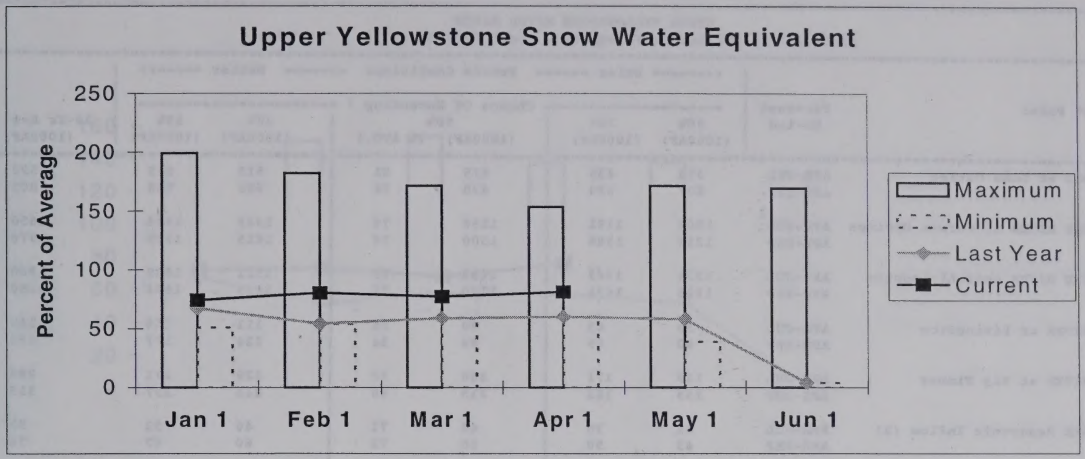
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

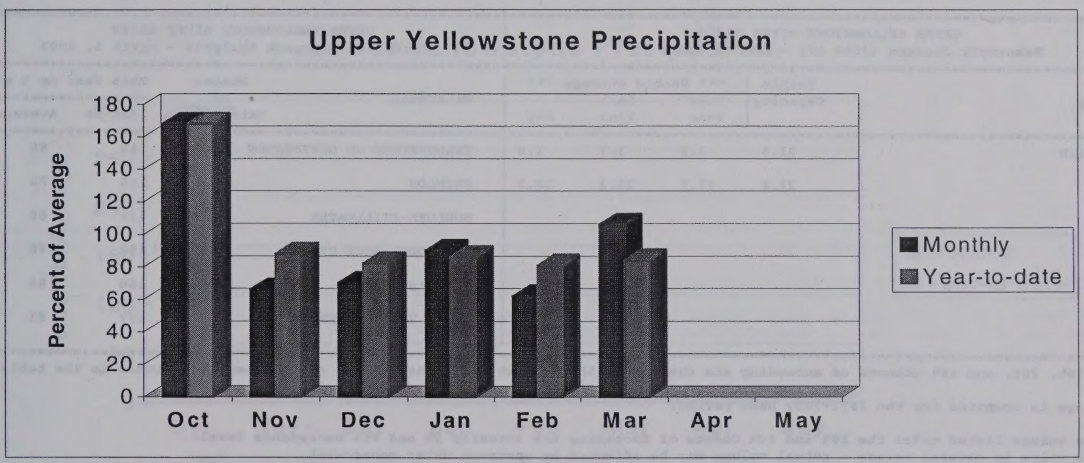
Upper Yellowstone River Basin

Snowpack conditions in the Upper Yellowstone River Basin were below average. Snow water content was 81 percent of average and 137 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1988; February maximum swe was in 1997 and minimum swe was in 2001; March maximum swe was in 1997 and minimum swe was in 2001; April maximum swe was in 1971 and minimum swe was in 2001; May maximum swe was in 1997 and minimum swe was in 1987; and June maximum swe was 1996 and minimum swe was in 2001. Average is for the period 1971 through 2000.

Mountain precipitation during March was 110 percent of average and 155 percent of last year. Valley precipitation during March was 50 percent of average and 71 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 84 percent of average and 131 percent of last year.



Mystic Lake storage was 111 percent of average and 118 percent of last year and Cooney storage was 97 percent of average and 80 percent of last year.

Surface Water Supply Index (SWSI) was -2.6 in the Yellowstone River above Livingston; -3.0 in the Shields River; -3.6 in the Boulder River; -3.5 in the Stillwater River; -3.6 in the Rock/Red lodge Creeks; -3.1 in the Clarks Fork River; and -2.9 in the Yellowstone River above Bighorn River.

UPPER YELLOWSTONE RIVER BASIN
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
YELLOWSTONE at Lake Outlet	APR-JUL	375	435	475	81	515	575	590
	APR-SEP	507	580	630	78	680	753	805
YELLOWSTONE RIVER at Corwin Springs	APR-JUL	1006	1151	1250	76	1349	1494	1650
	APR-SEP	1215	1385	1500	76	1615	1785	1970
YELLOWSTONE RIVER near Livingston	APR-JUL	1231	1349	1430	75	1511	1629	1900
	APR-SEP	1486	1631	1730	76	1829	1974	2280
SHIELDS RIVER nr Livingston	APR-JUL	38	63	80	55	111	156	145
	APR-SEP	40	69	88	54	124	177	162
BOULDER RIVER at Big Timber	APR-JUL	129	171	200	70	229	271	285
	APR-SEP	133	182	215	68	248	297	315
MYSTIC LAKE Reservoir Inflow (2)	APR-JUL	32	38	42	71	46	52	59
	APR-SEP	43	50	55	72	60	67	76
STILLWATER RIVER nr Absarokee (2)	APR-JUL	218	282	325	66	368	432	495
	APR-SEP	279	348	395	68	442	511	585
CLARKS FORK RIVER nr Belfry	APR-JUL	280	331	365	68	399	450	540
	APR-SEP	311	364	400	67	436	489	595
COONEY RESERVOIR Inflow (2)	APR-JUL	11.7	19.6	25	53	35	50	47
	APR-SEP	17.9	27	33	58	44	59	57
YELLOWSTONE RIVER at Billings (2)	APR-JUL	1631	2074	2375	68	2676	3119	3510
	APR-SEP	1277	2514	2840	69	3166	4408	4120

UPPER YELLOWSTONE RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MYSTIC LAKE	21.0	2.0	1.7	1.8
COONEY	27.4	17.7	22.2	18.3

UPPER YELLOWSTONE RIVER BASIN
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
YELLOWSTONE ab LIVINGSTON	18	148	86
SHIELDS	7	116	80
BOULDER-STILLWATER	7	131	80
RED LODGE-ROCK CREEK	5	112	60
CLARK'S FORK	7	160	84
UPPER YELLOWSTONE BASIN	40	137	81

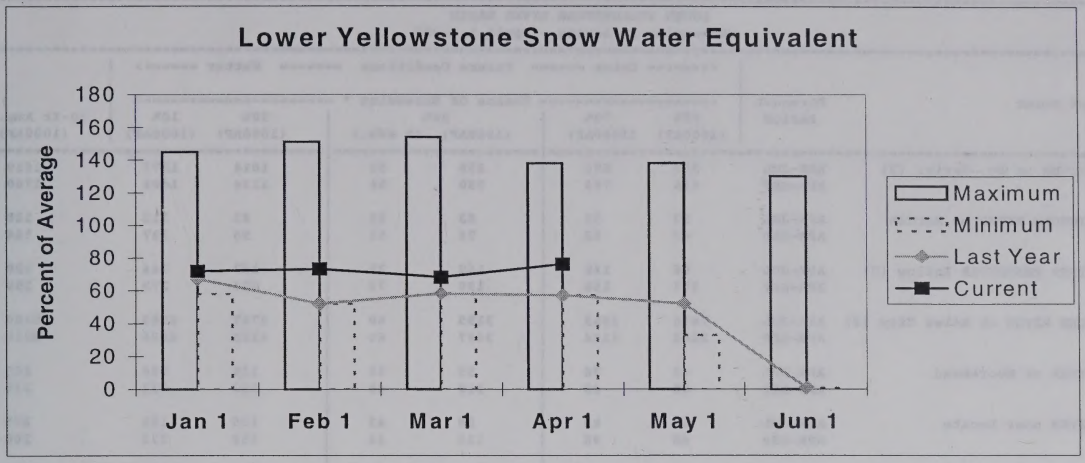
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

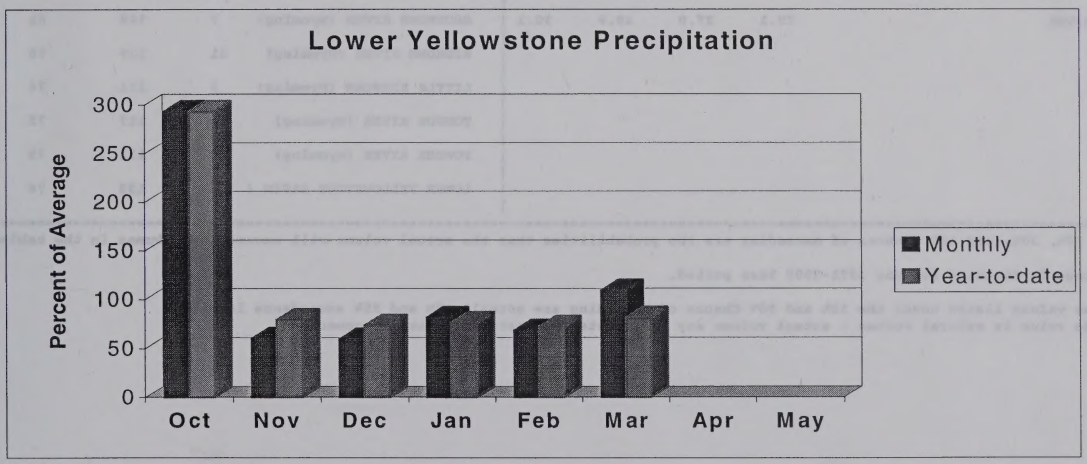
Lower Yellowstone River Basin

Snowpack conditions in the Lower Yellowstone River Basin, in Wyoming, were below average. Snow water content was 76 percent of average and 132 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 2000; February maximum swe was in 1997 and minimum swe was in 2001; March maximum swe was in 1986 and minimum swe was in 2001; April maximum swe was in 1986 and minimum swe was in 2001; May maximum swe was in 1997 and minimum swe was in 1981; and June maximum swe was in 1995 and minimum swe was in 2001. Average is for the period 1971 through 2000.

Mountain and valley precipitation during March was 105 percent of average and 157 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2001, was 82 percent of average and 127 percent of last year.



Bighorn Lake storage was 82 percent of average and 77 percent of last year and Tongue River storage was 90 percent of average and 66 percent of last year.

Surface Water Supply Index (SWSI) was -3.9 in the Bighorn River below Bighorn Lake; -3.3 in the Little Bighorn River; -3.4 in the Yellowstone River below Bighorn River; -2.9 in the Tongue River; and -3.5 in the Powder River.

LOWER YELLOWSTONE RIVER BASIN
Streamflow Forecasts - April 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
BIGHORN RIVER nr St. Xavier (2)	APR-JUL	393	656	835	52	1014	1277	1610
	APR-SEP	496	766	950	54	1134	1404	1760
LITTLE BIGHORN RIVER nr Hardin	APR-JUL	39	53	63	49	83	112	128
	APR-SEP	47	63	74	51	96	127	144
TONGUE RIVER RESERVOIR Inflow (2)	APR-JUL	86	133	165	75	197	244	220
	APR-SEP	107	156	190	76	224	273	250
YELLOWSTONE RIVER at Miles City (2)	APR-JUL	1830	2643	3195	60	3747	4560	5360
	APR-SEP	2484	3114	3697	60	4280	4906	6210
POWDER RIVER at Moorehead	APR-JUL	48	76	95	46	136	196	205
	APR-SEP	60	90	110	48	152	213	230
POWDER RIVER near Locate	APR-JUL	60	82	98	42	135	189	235
	APR-SEP	68	96	115	44	158	222	260
YELLOWSTONE RIVER nr Sidney (2)	APR-JUL	2137	2635	3380	62	4125	4658	5480
	APR-SEP	2512	3022	3870	62	4718	5401	6280

LOWER YELLOWSTONE RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BIGHORN LAKE	1356.0	662.0	854.3	809.9
TONGUE RIVER	79.1	27.0	40.9	30.1

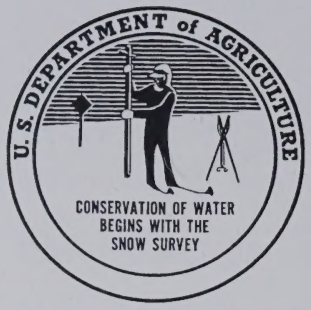
LOWER YELLOWSTONE RIVER BASIN
Watershed Snowpack Analysis - April 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
WIND RIVER (Wyoming)	20	152	76
SHOSHONE RIVER (Wyoming)	7	148	81
BIGHORN RIVER (Wyoming)	21	129	78
LITTLE BIGHORN (Wyoming)	3	111	74
TONGUE RIVER (Wyoming)	11	117	75
POWDER RIVER (Wyoming)	9	113	75
LOWER YELLOWSTONE BASIN (	50	132	76

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.



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Montana
Basin Outlook Report

Natural Resources Conservation Service
Bozeman, MT